Westinghouse

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September 8, 2006

SUBJECT: WESTINGHOUSE REQUEST FOR ADDITIONAL INFORMATION RESPONSES REGARDING THE ENVIRONMENTAL ASSESSMENT SUPPORTING SNM-1107 LICENSE RENEWAL (TAC 31911)

The following enclosure and supportive documentation is being provided by Westinghouse Electric Company (WEC) in response to the NRC License Renewal Application Request for Additional Information regarding the Environmental Assessment, dated July 26, 2006.

After you have reviewed the responses and supporting information, WEC looks forward to discussing any additional questions or concerns with you over the phone or at the Columbia Fuels Fabrication Facility (CFFF).

Sincerely,

Nancy Blair Parr

Nancy Blair Parr
Licensing Manager

Enclosure 1: Response to Environmental Assessment RAI Questions

cc: Ms. Mary T. Adams, Senior Project Manager
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U. S. Nuclear Regulatory Commission
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RAI RESPONSES FOR WESTINGHOUSE COLUMBIA FUEL FABRICATION FACILITY LICENSE RENEWWAL ENVIRONMENTAL ASSESSMENT

RAI 1 Response

The Westinghouse Columbia Fuel Fabrication Facility (CFFF) is located near Columbia, South Carolina and is situated on an approximately 1,158 acre site in Richland County, some 8 miles southeast of the city limits of Columbia along South Carolina Highway 48. The region around the site is sparsely settled, and the land is characterized by timbered tracts and swampy areas, penetrated by unimproved roads. Farms, single-family dwellings, and light commercial activities are located chiefly along nearby highways.

Of the total 1,158 acres, approximately 1098 acres of the site remain undeveloped. **No licensed** activities occur on this undeveloped property. Only 60 acres (about 5 percent) have been developed to accommodate the licensed activities associated with the fuel fabrication facilities, holding ponds, and landscaped areas.

Unlicensed activities that are conducted on the site include management of the forested areas for timber production; harvesting of the hay fields; employee hunting and fishing in designated areas of the plant property in accordance with the Westinghouse Hunting and Fishing Agreement; target practice for the on-site, contract security force; property surveillance on unimproved roads; recreational activities such as a one-mile fitness trail, softball field and picnic pavilion for employee use; operation of an air sparging/soil vapor extraction unit for groundwater remediation of volatile organic compounds; and any general land maintenance activities necessary to maintain the visual and scenic resources. In addition, in 2005, a parcel of land was transferred to South Carolina Electric and Gas (SCE&G) for a new electrical substation. Additional information regarding this substation is provided in response to RAI 14.

RAI 2 Response

The Westinghouse CFFF is located in rural southeast Richland County on the southeast edge of the Columbia Metropolitan Statistical Area (MSA). Based on discussion with the South Carolina Department of Health and Environmental Control (SC-DHEC), certain combined portions of the Lexington/Richland County MSA are designated as marginally non-attainment for the ozone 8 hour standard, and the state has entered into an Early Action Compact to defer the actual date of official non-attainment designation. Compliance with National Ambient Air Quality Standards (NAAQS) in metropolitan areas is typically related to local area meteorology, transportation, and major permitted dischargers (such as coal burning) that effect the primary pollutants.

Two of three SC-DHEC monitoring sites within the MSA are classified as "Attaining." The CFFF is located proximal to the SC-DHEC Congaree Bluff sampling site. Westinghouse does not conduct on-site monitoring for ambient air quality. Compliance with air regulations is demonstrated by issuance of the state air permit and emissions

modeling. The SC-DHEC Bureau of Air Quality Air Permit, SC#1900-0050 issued in May 2003 documents conditions and limitations. A copy of the air permit is attached.

RAI 3 Response

SC-DHEC Bureau of Air Quality issued the CFFF a state air permit in May 2003 documenting that Westinghouse was not regulated under more stringent conditions (i.e., major or significant minor emitter). Westinghouse is required to comply with the emission limitations in Section II of the permit. No requirements were noted whereby Westinghouse had to monitor the six primary criteria air pollutants (ozone, particulates, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead) noted in federal ambient air quality standards. Westinghouse has not monitored for those NAAQS pollutants, since no regulatory requirements were noted which required monitoring. This is confirmed by the state of South Carolina review of our air emissions and requiring the noted level of permitting.

RAI 4 Response

The following table documents the calculated site boundary radiological dose information based on annual stack emissions for the past six years:

Year	Total uCi Uranium Released	Dose, mrem/year
2000	501.8	0.30
2001	557.6	0.35
2002	556.1	0.35
2003	510.5	0.32
2004	598.6	0.38
2005	530.9	0.34

The radiological dose was calculated using the EPA "Comply" meteorological code assuming an individual at the nearest site boundary. These results are reported annually in the ALARA report. These annual doses are significantly below the ALARA goal noted in NRC Regulatory Guide 8.37; are significantly below the dose constraint level of 10mrem/yr in 10 CFR 20.1101(d); and are significantly below internal plant procedural investigation levels.

RAI 5 (1) Response

Radiological waste treatment and liquid effluent monitoring is documented in Section 5.0 of the Environmental Report. Documentation of liquid effluent and sampling is described in the flow diagram depicted in Attachment 3 of the Environmental Report, noting that all waste liquid effluents are combined and discharged to the Congaree River

in one line (outfall 001). All radioactive waste streams are treated and checked prior to discharge according to criteria noted in Section 5.0, as documented below:

Process waste streams from the chemical processing area are discharged from the combined ADU conversion area filtration/quarantine tank system. Preliminary treatment of liquid waste for the removal of uranium is completed in the ADU conversion area by the controlled area waste quarantine tank system equipped with an on-line monitoring system. This on-line NaI well detector spectroscopy system alarms and diverts waste to additional quarantine tanks and filtration, if the uranium concentration exceeds 30 ppm uranium (equivalent to 7.2 E-05 uCi/ml). Liquid waste from this system is pumped to the external waste treatment facility for additional radiological and chemical treatment. This second treatment system assures that the uranium in the liquid effluent is removed to a nominal level of 0.5 ppm uranium (equivalent to 1.2 E-06 uCi/ml at a specific activity of 2.4 uCi/gU).

The external waste treatment facility further processes the liquid waste for removal of uranium to de minimus levels at the Waterglass Advanced Wastewater Treatment facility. This process involves treatment of the liquid effluent stream with water soluble sodium silicate and precipitation and removal the uranium as an insoluble product using the Artisan continuous rotary pressure filter where the cake like solids containing uranium are removed. The Waterglass process effluent is typically controlled to insure that the liquid effluent is less than 0.5 mg U /l. Liquid waste may be stored in large storage tanks. Following uranium removal the liquid effluent waste is transferred to 30,000 gallon storage holding tanks in preparation for ammonia removal and recovery at the ammonia distillation process. All liquid process wastes are further treated in the West I or West II lagoons to assure removal of ammonium fluoride contaminants and compliance with the site EPA/SC-DHEC NPDES liquid effluent discharge permit. The supernatant liquid from the West I or West II lagoon is decanted to the North or South Lagoon. Daily batch operation discharges are determined to assure NPDES permit values and NRC limits are met. In addition, prior to final discharge of the process lagoon liquid effluent, over check analyses are performed on a batch basis on process liquid waste lagoons to assure that the final liquid effluent will meet required NRC discharge criteria.

A continuous proportional sample of the liquid released to Congaree River is collected and routinely analyzed to assure NPDES compliance. Also on a daily basis, a continuous proportional composite sample of the liquid effluent is collected and analyzed on-site for activity to verify it meets required NRC discharge criteria. A thirty day composite of these daily samples is analyzed off-site by a contracted environmental radiological laboratory for Gross Alpha, Gross Beta, and Isotopic Uranium content. These results are used to demonstrate compliance with NRC requirements.

RAI 5 (2 & 3) Response

As previously noted in Section 5.0 of the Environmental report:

The liquid effluent is tested with the required frequencies to demonstrate continuous compliance for the following parameters: pH, Fluoride, Ammonia, Dissolved Oxygen, BOD5, Total Suspended Solids, Phosphorus, Fecal Coliform, and Chlorine. The plant routinely complies with NPDES permit liquid effluent discharge limitations. A new permit was negotiated with SC-DHEC effective July 1, 2004. The regulatory compliance history is summarized in Table 1.1 and minimal documented permit exceedances are noted for the period 1995-2004.

Table 1.13 summarizes typical liquid effluent discharges for noted parameters in calendar year 2003 as part of information supplied in preparation for renewal of the NPDES Permit.

All other permit required chemical and NPDES results are within permit mass and concentration limitations (i.e. less than the maximums noted in the permit compliance table) as noted in detail in Attachment 2. From this Table 1.1 it can be concluded that Westinghouse maintains abeyance with NPDES permit conditions. A copy of the SC-DHEC liquid effluent NPDES permit #SC0001848 is provided as Attachment I in the Environmental Report.

As a supplement to this Environmental Report information, actual records of discharges are provided for the past five years in an attachment to this RAI response submittal.

The following documents a summary of liquid effluent dose:

CY	Whole Body Dose, mrem/yr
2000	0.00981
2001	0.00499
2002	0.00508
2003	0.00431
2004	0.00395
2005	0.00202

Note that the liquid effluent dose is not the major pathway in individual off-site dose calculations. Approximately 99+% of the off-site dose originates from the airborne pathway.

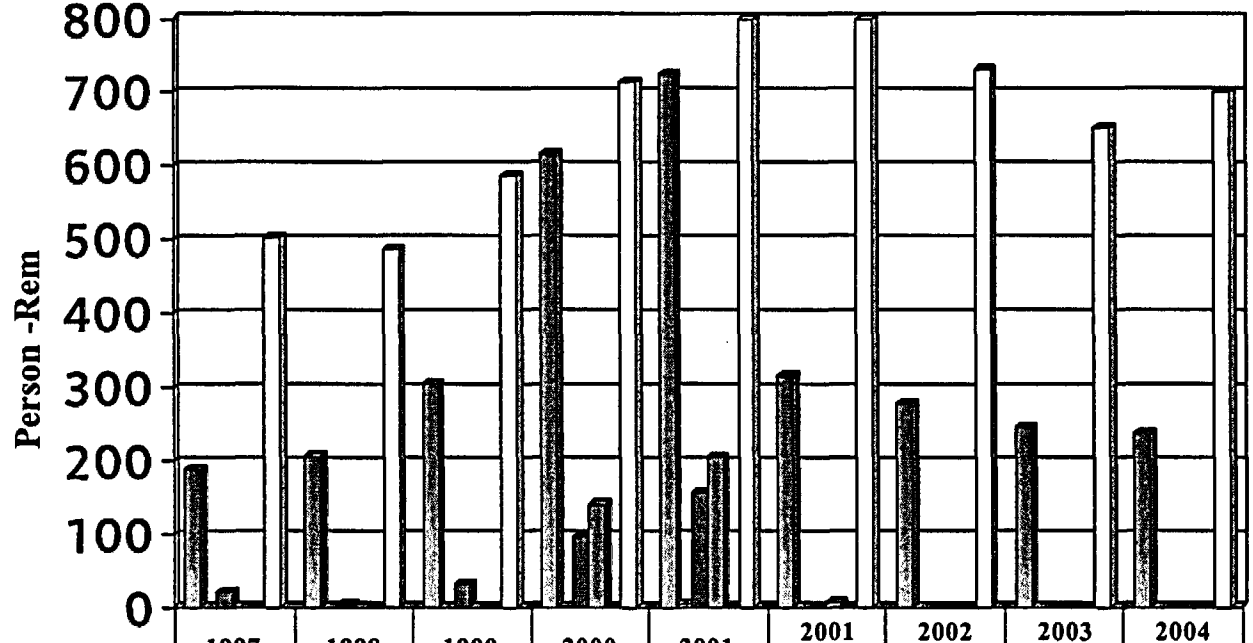
RAI 6 Response

The historical information related to stack discharge (air emissions) of micro curies uranium corresponds to an annual TEDE dose of less than 0.4 mREM/yr to an exposed individual living at the site boundary (using the EPA "Comply" meteorological code). Dose exposures for the last six years are detailed in the response to RAI 4 above.

Radiological Exposures to the public from CFFF operations are primarily via air emissions results which are described above. These historical results are less than the ALARA goal in NRC Regulatory Guide 8.37 and the SC-DHEC Licensing Guide, "ALARA Levels for Effluents from Materials Facilities" (10 mREM/year); less than the "dose constraint" level in 10CFR20.1101(d), and less than the investigation level in WEC procedures of 1 mREM/year. Air emissions from the CFFF are routinely monitored, the results are trended, and corrective actions are taken if necessary to ensure that emissions remain ALARA.

Figure 1 below shows the annual Columbia Site Collective Dose for all persons at the CFFF (occupational exposure) for the past several years (e.g., the sum of all TEDEs). Note that the site collective dose was 246 person-rem in 2003 compared to 279 person-rem for 2002, where both were calculated using the dose coefficients in ICRP 68. In late April 2002, the Nuclear Regulatory Commission (NRC) granted the Columbia Site authorization to use intake to dose conversion coefficients published in International Commission on Radiological Protection (ICRP) Publication No. 68. These coefficients were developed for use with a revised dosimetric model of the respiratory tract and more recent biological information related to the detriment associated with radiation exposure. In order to facilitate trend analysis, historic internal exposure CEDE data and resultant Total Effective Dose Equivalent (TEDE) values were normalized for comparison purposes. This was achieved by re-calculating the CEDE and TEDE values using the ICRP 68 dose coefficients.

FIGURE 1 - SITE COLLECTIVE TEDE (Person-Rem)



	1997	1998	1999	2000	2001	2001 ICRP 68	2002 ICRP 68	2003 ICRP 68	2004 ICRP 68
Collective Dose (Rem)	188	206	305	616	725	315	279	246	236
# > 4 Rem TEDE				2	4	0	0	0	0
# > 2 Rem TEDE	19	3	32	96	155	0	0	0	0
# > 1.5 Rem TEDE				141	204	6	2	0	0
AVG Rem	0.406	0.436	0.52	0.862	0.908	0.394	0.382	0.376	0.337
#RAD WORKERS	503	486	586	714	799	799	732	652	700

RAI 7 Response

Westinghouse is regulated by SC-DHEC with an NPDES general permit for storm water discharges associated with industrial activity, SCR000000. Westinghouse has implemented an approved Storm Water Pollution Prevention Plan (previously described in the 6/28/06 correspondence) to assure regulatory requirements are met. No process wastes are discharged to storm drains (i.e., only non process surface water runoff).

Westinghouse performs as a minimum monthly grab sample checks at the composite "Road Storm Drain (001)" location adjacent to the "C" control valve. This sampling includes chemical monitoring for pH, fluoride, and ammonia. Documentation of these results for 2000-2005 are provided as an attachment to this report. Radiological monitoring is also performed on monthly composites and that data was provided in the Environmental Report in Table 1.19, Surface Water Summary.

RAI 8 Response

The generation rates and site storage capacities for all types of waste managed at the CFFF are presented in the following table:

WASTE TYPE	GENERATION RATE	STORAGE CAPACITY
TRU	**0**	**0**
LLRW	**15,600 cubic ft / yr**	**83,000 sq.ft storage pad**
Mixed LLRW	**0**	**0**
Hazardous	**40,000 lbs./yr**	**375 sq. ft storage pad***
Nonhazardous		
.....Liquid	**12,000 lbs./yr**	**375 sq. ft storage pad***
.....Solid A**	**3,000 lbs./yr**	**375 sq. ft storage pad***
.....Solid B**	**610 tons/yr**	**NA – contract service**

* Note1: There is one 375 sq. ft storage pad that is shared.

** Note 2: Nonhazardous Solid Waste A consists of items such as batteries, computers, oil filters, rags, etc.
Nonhazardous Solid Waste B consists of general industrial trash, waste generated from office areas, lunch rooms, etc.

RAI 9 Response

An original ammonia groundwater contamination event was noted in 1980 involving contamination south-southwest of the facility as a result of leaks at waste treatment and product storage. The effects of the ammonia contamination at the initial most elevated location W-7 appear to have been corrected from a concentration of 1000 mg/l to current levels of approximately 55 mg/l by remedial actions and attenuation of the source.

A second groundwater contamination event was noted at the site following performance of an EPA site screening inspection at the facility in February 1989. Following this screening, a report was issued in July 1989 indicating that organic compounds were detected in the groundwater. Westinghouse confirmed in 1993 that chlorinated VOCs (including perchloroethylene and PCE degradation products) were detected in the groundwater and performed a detailed site inspection assessment in 1994 documenting VOC contamination west southwest of the plant extending 1000 feet from the old oil house to Sunset Lake. The perchloroethlyene contamination was estimated to have occurred due to temporary storage of leaking drums outside the oil house prior to passage of regulations requiring more prescriptive methods of handling hazardous materials and waste.

After contracting an environmental hydrogeological consultant firm to review the problem and assist with alternatives, Westinghouse reviewed the event with SC-DHEC and voluntarily installed a groundwater remediation system consisting of air sparging and soil vapor extraction in 1998 as a preventive barrier to prevent VOCs (perchloroethylene and degradation products) from reaching the deeper groundwater aquifers and surface water, i.e., Sunset Lake. The objective of this approach is to contain the plume and prevent further migration. The VOCs will be vaporized into the air. Operation of this system was voluntarily agreed to by Westinghouse and not initiated as a result of SC-DHEC order.

Initially wells were analyzed to contain approximately 0-3000 ug/l VOCS (1995-98). The maximum noted in the 2004 report was 569 ug/l. Processes have been implemented to assure that raw materials or waste VOC containing materials do not leak or contaminate groundwater. Based on data review, the above efforts appear to have been successful in containing the VOC plume and preventing additional contamination.

Air sparging involves pressurizing a well to introduce air below the water table to promote volatilization and biodegradation. Soil vapor extraction involves withdrawal of air under negative pressure from the vadose zone. When coupled with air sparging, soil vapor extraction expedites the volatilization of organic compounds to the atmosphere.

Westinghouse has continued with implementation of the chlorinated solvent remediation project by assuring continuous operation of the air sparge/soil vapor extraction system since its installation. This process along with elimination of new source term spills has effectively operated to remove and attenuate VOCs and perchloroethylene contamination from the shallow surficial aquifer southwest of the oil house. Also, this process helps insure against migration and contamination of site surface water

Well water analysis is required as an NRC license commitment on ten surficial aquifer wells. A third investigation was noted in 1998 related to three identified NRC well sampling sites exceeding 50 pCi/l Gross Beta investigation limit (Well7, Well 32, and Well 13). Corrective actions implemented at the cylinder recertification building and hydrostatic test operation in 1998 appear to have been effective in eliminating the source

of elevated beta activity. Also, alarms have been installed on T-1405 to minimize overflow potential.

Westinghouse also samples 15 wells for chemicals for SC-DHEC as required by the NPDES permit.

As an attachment to this report, summary data is provided from the consultant 1995 groundwater testing report summary and recent summary groundwater reports sent to SC-DHEC.

RAI 10 Response

During the investigation to detect groundwater contamination, multiple soil geoprobe pentrations were completed in the locations near the (old oil house) estimated to have been effected by the past spills of chlorinated solvents. Soil samples were taken at depths from 3 to 11 feet. One sample was noted to contain Total VOC's equal to 4.5 mg/kg; and nineteen other samples indicated Total VOC's less than 0.3 mg/kg. A summary and a map documenting the soil sampling data are provided as an attachment to this report.

No management program was necessary specifically to manage the soil. Programs were implemented to manage the groundwater in the shallow surficial aquifer beneath the soil.

The soil impacted by chlorinated solvent contamination would be leached by rainwater, the surface aquifer, and then be attenuated by reaction with soil bacteria. No requirements were established by SC-DHEC to remove soil at the low documented levels of contamination.

The routine groundwater sampling program and data review would initiate additional sampling if increased contaminants were noted.

RAI 11 Response

(2) The information provided in the ER should have stated ".... approximately 3,975,793 gallons/month."

(1) The WEC CFFF is permitted within Watershed 03050110-010, which is located in Richland, Lexington, and Calhoun Counties and consists primarily of the Congaree River and its tributaries from its origin to Cedar Creek. The watershed occupies 140,459 acres of the Sandhills and Upper Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 54.2% forested land, 21.8% forested wetland (swamp), 11.9% agricultural land, 7.4% urban land, 2.3% water, 2.0% barren land, and 0.4% nonforested wetland (marsh). The Congaree River originates with the confluence of the Saluda River Basin and the Broad River Basin in the City of Columbia. There are a total of 269.7 stream miles and 643.2 acres of lake waters in this watershed.

Active NPDES Facilities in this watershed and information are listed below:

RECEIVING STREAM NPDES#
FACILITY NAME TYPE
PERMITTED FLOW @ PIPE (MGD) COMMENT

CONGAREE RIVER SCG730263
MARTIN MARIETTA AGGREGATES/CAYCE QUARRY MINOR INDUSTRIAL
PIPE #: 01A-01C, 02A-02C FLOW: M/R

CONGAREE RIVER SC0001333
VORIDIAN MAJOR INDUSTRIAL
PIPE #: 001 FLOW: 100.82

CONGAREE RIVER SC0001848
WESTINGHOUSE ELECTRIC LLC/COLUMBIA MAJOR INDUSTRIAL
PIPE #: 001 FLOW: 0.130

CONGAREE RIVER SC0002062
SCE&G/COLUMBIA HYDRO PLANT MINOR INDUSTRIAL
PIPE #: 001 FLOW: 0.067

CONGAREE RIVER SC0020940
CITY OF COLUMBIA/METRO PLANT MAJOR DOMESTIC
PIPE #: 001 FLOW: 60.00

CONGAREE RIVER SC0024147
CITY OF CAYCE WWTP MAJOR DOMESTIC
PIPE #: 001 FLOW: 12.0
PIPE #: 001 FLOW: 16.0, 24.0 PROPOSED

CONGAREE RIVER SC0033367
DEVRO INC./CORIA DIV. MINOR INDUSTRIAL
PIPE #: 001 FLOW: 0.4

CONGAREE RIVER SC0038865
EAST RICHLAND COUNTY PSD/GILLS CK PLT MAJOR DOMESTIC
PIPE #: 001 FLOW: 10.5 TIER I
PIPE #: 001 FLOW: 13.0 TIER II
PIPE #: 001 FLOW: 16.0 TIER III

CONGAREE RIVER SCG641005
CITY OF WEST COLUMBIA/WTP MINOR DOMESTIC
PIPE #: 001, 002 FLOW: M/R

CONGAREE RIVER SC0041386
SC DEPT. AGRIC./CALIBRATION STATION MINOR INDUSTRIAL
PIPE #: 001, 002 FLOW: M/R

DRY CREEK SC0031178
BROOKFOREST MOBILE HOME ESTATES MINOR DOMESTIC
PIPE #: 001 FLOW: 0.027

DRY CREEK TRIBUTARY SC0030988
BELLE MEADE SD MINOR DOMESTIC
PIPE #: 001 FLOW: 0.08

DRY CREEK TRIBUTARY SC0031402
PINEY GROVE UTILITIES/LLOYDWOOD SD MINOR DOMESTIC
PIPE #: 001 FLOW: 0.1548

ROCKY BRANCH SCG730054
VULCAN CONSTR. MATERIALS CO./COLA QUARRY MINOR INDUSTRIAL
PIPE #: 01A-01C, 02A-02C FLOW: M/R

TOMS BRANCH SC0031321
TCH PROPERTIES LLC MINOR DOMESTIC
PIPE #: 001 FLOW: 0.038

TOMS BRANCH SC0033685
ROLLING MEADOWS MHP/HERITAGE MINOR DOMESTIC
PIPE #: 001 FLOW: 0.0715

SAVANY HUNT CREEK SC0040339
SC DEPT OF TRANS./I-26 REST AREA MINOR DOMESTIC
PIPE #: 001 FLOW: 0.06
PIPE #: 001 FLOW: 0.10, 0.25, 0.35, 0.50 PROPOSED

Growth Potential

There is an overall high potential for growth in this watershed, which contains a portion of the City of Columbia. There is a low to moderate potential for residential and industrial growth in the Olympia area of the City of Columbia, and high growth and development for the Congaree Vista in the downtown area. . The Three Rivers Greenway will increase recreational use in this area. Growth is also projected along the I-77 beltway around the city. The Olympia and Bluff Road areas contain heavy industrial development. Only the upper portion of the watershed, near the City of Columbia, has available water and sewer service. The City of Columbia is installing an effluent diffuser in the Congaree River to improve dilution of the treated effluent. The Cities of West Columbia and Cayce are also located in this watershed. There are plans to extend water and sewer facilities capable of handling residential and industrial development within the next five to ten years. The area around Silver Lake is expected to undergo substantial residential and industrial development. The area south of the City of Cayce, along I-26 and U.S. 321, and the Bluff Road/Shop Road area in Columbia are expected to experience heavy growth. The area along U.S. 176 and U.S. 21 should experience moderate growth, primarily industrial.

Additional information is available at the following web address:
http://www.scdhec.gov/eqc/water/shed/congaree.html

RAI 12 Response

The below information is the conclusion of a Population Change and Development Activity report prepared by the Central Midlands Council of Governments in December of 2005 and provides an informational basis for the previous Westinghouse response.

"Since the 2000 U.S. Census, the Central Midlands region of South Carolina has seen notable increases in its population and housing stock, as well as in its commercial and industrial sectors. A significant portion of the increases in population and housing has occurred in two areas of the region: around the Town of Lexington and in Northeast Richland County. At the same time, there are indications that population growth is

occurring beyond these core areas, towards southern and western Lexington County, as well as into the southern and eastern portions of both Newberry and Fairfield Counties. Commercial activity grew the most within the center of the region, with Columbia as the core, extending north to Irmo, west to the Town of Lexington and northeast to Kershaw County, along US-1 and I-20. Industrial growth occurred not only in Lexington County, between West Columbia and the Town of Lexington, but also to the north, in Newberry and Fairfield Counties. In all cases, it was located near interstates 26, 20 and 77.

The next five years should see further enhancements of these trends, with strong population and new housing growth in the same core areas of the region, but also an increase in population and new housing on the outer edges of Lexington, Newberry and Fairfield Counties. Commercial activity will be strongest within the center of the region, from the Town of Lexington, through Columbia, out to Kershaw County, but will also begin to follow population growth occurring in western and southern Lexington County, as well as in southern and eastern Newberry and Fairfield Counties. Industrial growth is expected to continue around the different interstate highways within the region – near I-26 in Newberry County, I-20 in Lexington County, and I-77 in Richland and Fairfield Counties."

The full report is available at the following web address:
http://www.centralmidlands.org/pdf/2000-04%20Mid-Census%20Review.pdf.

RAI 13 Response

The license application submitted in the Westinghouse July 28, 2006 correspondence addresses the 10CFR70 required attributes for change control at the CFFF. The Conduct of Operations Chapter 3 includes all the management measures necessary for a comprehensive change control process. This includes Configuration Management Section 3.1 (focus on physical attributes), Procedures, Training and Qualification (operations focus), and describes the environmental regulatory review and other management measures, (e.g., Quality Assurance, Maintenance, etc.) which ensure the review process is effective in addressing environmental impacts. The implementing procedures used at the CFFF must address not only those activities regulated by the NRC, but must address also the requirements of other governing regulations and regulatory agencies, as well as corporate policies and procedures.

RA-104 is the primary procedure used by the regulatory staff in the review of changes. The purpose of this procedure is to establish an integrated procedure for providing the radiation safety, environmental protection, nuclear criticality safety, safeguards, fire safety, chemical safety, and other health and safety criteria associated with proposed or requested modifications of, or additions to, existing hazardous material handling and storage systems, hazardous equipment, uranium processing and associated facilities and operations.

The scope of this procedure is: "All applicable plant operations shall be conducted in accordance with technically sound (ALARA) requirements for protection against health and safety hazards; and, shall be performed in accordance with NRC, SC-DHEC, and other applicable rules and regulations. Proposed modifications of, or additions to, existing structures, systems, and components with health, safety, or environmental protection significance shall be reviewed and approved by Environment, Health & Safety (EH&S) prior to implementation."

The specific functions assigned to EH&S is to "*Assure that all applicable* TAF-500-1 Configuration Control Changes are reviewed for Radiation Safety, Environmental Protection, Nuclear Criticality Safety, Safeguards, Fire Safety, Chemical Safety, and other Health and Safety needs; and approved in accordance with this procedure prior to implementation." EH&S personnel use the RAF-104-5, Environmental Protection Guidelines and Check List form as a checklist for internal regulatory review to ensure that all environmental criteria are considered during the review.

CA-002, Columbia Plant Procedure System, addresses other "Operational" aspects including operational activities with the potential environmental impact. The purpose of this procedure is to: 1) establish Columbia Plant guidelines for a standardized procedure system, and 2) define the responsibilities for the preparation, approval, distribution, revision, control, and acknowledgment of Controlled Documents.

The Columbia Plant procedure system is an extension of applicable Westinghouse Electric Company, Nuclear Fuel, (Level 1 and 2) policy and procedures, and provides additional plant-wide administrative and operating procedures (Level 3) necessary to meet corporate, regulatory, and customer requirements. This procedure describes the development and maintenance of plant administrative, operating, and departmental operating procedures, and mandates the following:

"Any procedure that contains industrial, fire, chemical, radiation, environmental or criticality safety or safeguards information must be reviewed and approved by appropriate Criticality Safety Engineer, Radiation & Environmental Safety Engineer, Chemical & Fire Safety Engineer and Safeguards Engineer."

The Westinghouse CFFF change control program is comprehensive and ensures the potential environmental impacts from changes to facilities and operations are reviewed and approved by the appropriate EH&S disciplines, including the Environmental Safety Engineer.

RAI 14 Response

Westinghouse was approached by SCANA/SCE&G in 2003 to consider purchase of property to locate a new commercial substation on a small tract of land (6.89 acres) northwest of the facility outside the controlled access area to distribute power in

southeastern Richland County. The addition of these facilities and associated transmission lines will improve reliability of electric service to Westinghouse and other customers in this area. A small existing SCE&G transformer had been located on site to bring power to the plant preceding the request. SCE&G operations and maintenance crews entered the site to maintain this equipment. After construction, it is estimated that a SCE&G/ SCANA employee will be on site less than 10 hours per month.

A Phase I Environmental Assessment Report was prepared by SCANA. The current and past use of the property had been noted for use in silviculture purposes (softwood-pine). A copy of the SCANA Phase I report is provided as an attachment to this response. The adjacent properties near this approximate 7 acre plot are owned by Westinghouse and are undeveloped with the exception of the gravel road bordering the property and a walking trail to the east.

After evaluation, Westinghouse determined that the proposed substation property location was remote (i.e., outside the restricted area and outside any sites of environmental concern) to the plant facility and that the sale and impact of constructing and operating an electrical substation which is not routinely staffed with personnel would not substantially impact or interfere with the Westinghouse site operation. Likewise, Westinghouse operations should not impact the substation. The substations are currently under construction by SCANA and will be ready for service approximately May 2007.

Attachments

1. RAI-2	SC-DHEC Air Permit
2. RAI-5	NPDES Summary Data
3. RAI-7	Road Surface Water Data
4. RAI-9	Groundwater Well Sampling Data
5. RAI-10	Soil Geoprobe Sampling Data
6. RAI-14	SCANA Phase I Report

RAI-2 Attachment

D H E C

PROMOTE PROTECT PROSPER

2600 Bull Street
Columbia, SC 29201-1708

OFFICE OF ENVIRONMENTAL QUALITY CONTROL
BUREAU OF AIR QUALITY
OPERATING PERMIT

Westinghouse Electric Company
5801 Bluff Road
Columbia, South Carolina 29204

Pursuant to the provisions of the *Pollution Control Act*, Sections 48-1-50(5) and 48-1-110(a), 1976 *Code of Laws of South Carolina* and the *South Carolina Air Quality Control Regulation 62.1*, Section II(B), the Bureau of Air Quality authorizes the operation of the equipment specified herein in accordance with the plans, specifications and other information submitted in the construction permit application. This permit is subject to all conditions and operating limitations contained herein.

ID	Equipment Description	Control Device (control efficiency)
01	A 2.51 million Btu/hr natural gas fired 500 lb/hr industrial incinerator.	1995
02	A 14.6 million Btu/hr natural gas/No. 2 fuel oil fired Boiler.	--
03	A 14.6 million Btu/hr natural gas/No. 2 fuel oil fired Boiler	--
04	A 8.3 million Btu/hr natural gas/No. 2 fuel oil fired Boiler	--
05*	VOID - A 200 kW Emergency Generator; No. 2 fuel oil	--
06*	VOID - A 250 kW Emergency Generator; No. 2 fuel oil	--
07*	VOID - A 500 kW Emergency Generator; No. 2 fuel oil	--
08*	VOID - A 500 kW Emergency Generator; No. 2 fuel oil	--
09	Calciner #1: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0	--
10	Calciner #2: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0	--
11	Calciner #3: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0	--
12	Calciner #4: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0	--
13	Calciner #5: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0	--
14	Conversion System #1	Ammonium Diuranate High Energy Venturi Cyclone (Heil 724); HEPA filters
15, 16	ADU Scrap Recovery & ADU On-Line Scrubber S-1030 System (A & B)	KCH-Hedron V packed tower scrubber and HEPA filter (for NH3OH and H2O droplets)
17	Ammonia Fume Scrubber	KCH-Phaser IV packed tower scrubber with HEPA filters
18	ADU/Waste Recovery Waterglass Scrubber Exhaust	KCH Hedron – 5-5 Packed tower scrubber
19	Plating Room Scrubber Exhaust	Heil 760 Packed Horizontal Baffle Scrubber
20	Uranium Recovery/Solvent Extraction	Harrington Horizontal Packed Baffle Venturi scrubber with Cyclone Scrubber; HEPA filters
21	Vapor degreasing operation; batch vapor cleaning machine; control devices; NESHAP - VOID	--

*These sources have been exempted. As per a conversation with the facility February 2003, these emergency generators are used only for emergency purposes.

PERMIT NUMBER: 1900-0050
DATE OF ISSUE: May 12, 2003
EXPIRES ON THE LAST DAY OF: April 2008
PLANT LOCATION: 5801 Bluff Road - Columbia
SIC CODE: 2819

I. STANDARD CONDITIONS

A. The permit to operate may be renewed upon evidence of satisfactory operational experience during the prior operating period.

B. This permit expressly incorporates all the provisions of *South Carolina Department of Health and Environmental Control Regulation 61-62.1*, Section II(C).

II. SPECIAL CONDITIONS

A. EMISSION LIMITATIONS

Air pollutant emissions shall not exceed the following:

ID	Pollutant/ Standard	Limit	Reference Method	Regulation	State Only
01	PM	0.5 lb/million Btu heat input	5	SC Regulation 62.1-62.5, Standard 3, Section III	No
01	Opacity	20%	9	SC Regulation 62.1-62.5, Standard 3, Section III	No
02, 03, 04	Opacity	20%	9	SC Regulation 62.1-62.5, Standard 1, Section I	No
02, 03, 04	PM	0.6 lb/million Btu heat input	5	SC Regulation 62.1-62.5, Standard 1, Section II	No
02, 03, 04	SO2	3.5 lb/million Btu heat input	6	SC Regulation 62.1-62.5, Standard 1, Section III	No
09-14	Opacity	40%	9	SC Regulation 62.1-62.5, Standard 4, Section IX	No
15-20	Opacity	20%	9	SC Regulation 62.1-62.5, Standard 4, Section IX	No

*As Approved By BAQ
N/A = Not Applicable

The above emission limitations are based on the operation at rated capacity. Operation at other than rated capacity must meet the emission limits specified in the applicable regulations based on that operating rate. All test methods must be the most recent revisions that are published in the *Code of Federal Regulations* (40 CFR 60 Appendix A) as in effect on the date of this permit issuance.

B. CONTINUOUS MONITORING REQUIREMENTS

ID	Pollutant	Averaging Time
N/A	N/A	N/A

C. SOURCE TEST SCHEDULE

ID	Pollutant	Frequency	Method
N/A	N/A	N/A	N/A

D. ADDITIONAL CONDITIONS

Condition Number	Conditions
1.	(Facility wide) The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees.
2.	(Facility wide) In accordance with SC Regulation 61-62.1 Section II(C)(3), for all sources not required to have continuous emissions monitors, in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) District office within twenty-four (24) hours after the beginning of the occurrence. The permittee shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain as a minimum, the following: the identity of the emission unit and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.
3.	(Facility wide) Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal standard. Any changes in the parameters used in the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment A of this permit. Higher emission rates may be administratively incorporated into Attachment A of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded. The owner/operator shall maintain this facility in compliance with the pollutant limitations in Section II(A) - Emissions Limitations, and/or as listed in Attachment A of this operating permit, whichever is more restrictive. This is a State Only enforceable requirement. Should the facility wish to increase the emission rates listed in Attachment A, it may do so by the administrative process specified in this permit condition.
4.	(Facility wide) These conditions shall not supersede any State or Federal requirements such as National Emission Standards for Hazardous Air Pollutants, unless these conditions would impose a more restrictive limit.
5.	(ID 02, 03 and 04) In accordance with South Carolina Regulation 61-62.5, Standard 1 - EMISSIONS FROM FUEL BURNING OPERATIONS, Section II -PARTICULATE MATTER EMISSIONS, the allowable discharge of particulate matter resulting from the fuel burning operations is 0.6 lbs/10^6 BTU input.
6.	(ID 02, 03, and 04) In accordance with South Carolina Regulation 61-62.5, Standard 1 - EMISSIONS FROM FUEL BURNING OPERATIONS, Section III -SULFUR DIOXIDE EMISSIONS, the maximum allowable discharge of SO_2 resulting from the fuel burning operations is 3.5 lbs/10^6 BTU input.
7.	(ID 02, 03, 04) Are permitted to burn only natural gas and NO. 2 fuel oil (0.5% sulfur content by weight) as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.
8.	(ID 09-14) Are permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.

Condition Number	Conditions
9.	(ID 02, 03, 04) In accordance with SC Regulation 61-62.5, Standard No. 1, Emissions from Fuel Burning Operations. ID 02, 03 and 04 shall not discharge into the ambient air smoke which exceeds an opacity of 20%. The twenty (20) percent opacity limit may be exceeded for sootblowing, but may not be exceeded for more than six (6) minutes in a one hour period nor be exceeded for more than a total of twenty-four (24) minutes in a twenty-four (24) hour period. Emissions caused by sootblowing shall not exceed sixty (60) percent opacity. The opacity standards set forth above do not apply during startup or shutdown. The owner/operator shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. The owner/operator shall, for a period of at least five (5) years maintain a log of the time, magnitude, duration and any other pertinent information to determine periods of startup and shutdown and make these records available to a Department representative upon request.
10.	(ID 09-14) In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began on or before December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 40%.
11.	(ID 15-20) In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.
12.	(ID 01) As specified in SC Regulation 61-62.5, Standard 3, Section IX all incinerator operators shall be trained based on criteria contained in South Carolina Regulations 61-62.5, Standard 3, Section IX, Part C as to proper operating practices and procedures of the incinerator. The content of the above referenced training program, in addition to a list of trained personnel, shall be submitted to the Manager of the Technical Management Section, no later than thirty (30) days after the start up of the incinerator. The incinerator shall not be operated without a trained operator on site, who has a certificate verifying satisfactory completion of the approved training program.

E. Exempt Sources

Equip ID	Exempt Source Description (Exemption Date)	Basis
A*	A 200 kW Emergency Generator; No. 2 fuel oil, installed 1975 (4/4/03)	SC Regulation 62.1, Section II, Part F(2)(e)
B*	A 250 kW Emergency Generator; No. 2 fuel oil, installed 1975 (4/4/03)	SC Regulation 62.1, Section II, Part F(2)(e)
C*	A 500 kW Emergency Generator; No. 2 fuel oil, installed 1981 (4/4/03)	SC Regulation 62.1, Section II, Part F(2)(e)
D*	A 500 kW Emergency Generator; No. 2 fuel oil, installed 1981 (4/4/03)	SC Regulation 62.1, Section II, Part F(2)(e)

*These sources used to be listed as IDs 05-08.

No deviation from the plans and specifications submitted with your application or the conditions specified herein is permitted, unless authorized in writing by the Bureau of Air Quality. The owner/operator is responsible for satisfactory compliance with all Air Pollution Regulations and Standards.

Carl W. Richardson, P.E., Director
Engineering Services Division
Bureau of Air Quality

ATTACHMENT A

Modeled Emission Rates
Westinghouse Electric Company
1900-0050

AMBIENT AIR QUALITY STANDARDS - STANDARD 2					
STACK	Modeled Emission Rates (lbs/hr)				
	TSP	PM_{10}	SO_2	NO_X	CO
Boiler #1	0.34	0.25	7.40	2.09	1.2
Boiler #2	0.34	0.25	7.40	2.09	1.2
Boiler #3	0.20	0.14	4.21	1.19	0.68
Incinerator	0.175	0.118	0.625	0.75	2.50
Calciner Exhaust #1	0.0042	0.0042	0.0003	0.057	0.047
Calciner Exhaust #2	0.0042	0.0042	0.0003	0.057	0.047
Calciner Exhaust #3	0.0042	0.0042	0.0003	0.057	0.047
Calciner Exhaust #4	0.0042	0.0042	0.0003	0.057	0.047
Calciner Exhaust #5	0.0042	0.0042	0.0003	0.057	0.047

TOXIC AIR POLLUTANTS MODELED - STANDARD 8	
STACK	Modeled Emission Rates (lbs/hr)
	Nitric Acid 769-73-72
Facility Wide	0.77

KAL-5 Attachment

NPDES Chemical Summary 2005

	Flow	Flow max	NH3	max	F	max	BOD5	max	TSS	max	Cl2	FC	P,mg/l
Jan	110.5	149.4	18.2	42.5	2.1	3.7	4.2	6	9.2	11.45	0.2	2	1
Feb	100.3	172	39.8	73.97	2.06	4.3	3.15	5.84	6.59	12.88	0.5	2	0.9
Mar	106.26	136.8	38.6	56.68	2.25	3.27	7.2	15.48	18.65	28.78	0.1	2	1.2
Apr	99.85	175.8	33.9	52.34	4.37	9.18	12.1	17.4	10.74	20	0.1	2	1.8
May	92	120.2	19	40.49	2.47	7.91	4.16	6.37	10.2	15.68	0.3	2	1.2
June	103.11	159.93	6.32	12.63	2.85	3.92	7.5	11.18	16.16	26.08	0.1	2	1.4
Jul	116.41	155.68	8.45	19.25	3.7	9.61	16.44	27.74	14.54	19.2	0.35	2	1.5
Aug	116.16	157.28	11.9	27.22	3.7	6.4	12.2	18.79	17.6	27.33	0.09	6	1.1
Sept	114.2	151.6	11.2	15.35	2.76	4.07	17.48	28.94	23.32	57.88	0.09	2	1.14
Oct	99.37	145.38	17.57	30	2.55	4.7	6.7	8.68	6.96	8.43	0.14	2	1.8
Nov	102.61	124.57	21.03	38.84	2.21	3.85	3.42	8.1	5.56	7.39	0.1	2	0.9
Dec	91.13	141.3	26.7	52.45	2	4.49	7.83	13.54	5.77	8.75	0.44	2	0.52
	1251.9	1789.94	252.67	461.72	33.02	65.4	102.38	168.06	145.29	243.85	2.51	2	
AVG	**104.33**	**149.16**	**21.06**	**38.48**	**2.75**	**5.45**	**8.53**	**14.01**	**12.11**	**20.32**	**0.21**	**2.33**	**1.21**
MAX	**116.41**	**175.8**	**39.8**	**73.97**	**4.37**	**9.61**	**17.48**	**28.94**	**23.32**	**57.88**	**0.5**	**6**	**1.8**

NPDES Chemical Summary 2004

	Flow	Flow max	NH3	max	F	max	BOD5	max	TSS	max	Cl2	FC	P,mg/l	
Jan	123.9	159.1	33.9	67	5.5	13.4	6.28	10.8	14.3	28.56	0.11	2		
Feb	123	164.1	39.5	13	8.7	17.4	7.53	10.7	19.8	37.5	0.2	2		
Mar	120.79	153	22.9	34.8	3.5	7	7.79	15.1	13.6	19.88	0.1	2		
Apr	115.91	164	14.8	35.3	2.9	4.63	11.9	27.4	17.3	23.85	0.5	2		
May	108.72	143.3	14.6	28.96	3.5	27.1	4.87	10	20.4	32.2	0.2	2		
June	88.25	163.1	6.1	14.96	2.7	5.11	14.6	36.73	14.3	34	0.1	2		
Jul	110.4	183.9	8.7	24.1	3.4	8.21	12.8	14.88	11	15.99	0.1	2	2.1	
Aug	117.27	188.4	4.9	12.6	3.7	6.77	14	24.4	14.8	30.1	0.1	2	1.4	
Sept	125.06	179.8	8.3	14.8	5.6	9.4	13.2	23.99	18.3	24.47	0.1	37	1.2	
Oct	113.72	159.1	11.4	19.9	3.6	5.9	5.8	11.8	9.5	21.6	0.1	2	0.81	
Nov	82.59	165.2	11.5	26.18	3	5.7	13.6	29.19	10.2	14.6	0.3	2	1.4	
Dec	110.35	159.2	22.8	34.59	2.9	5.1	5.9	10.7	8	9.35	0.4	2	0.01	
	1339.96	1982.2	199.4	326.19	49	115.72	118.27	225.69	171.5	292.1	2.31	2		
AVG	**111.66**	**165.18**	**16.62**	**27.18**	**4.08**	**9.64**	**9.86**	**18.81**	**14.29**	**24.34**	**0.19**	**4.92**	**1.15**	
MAX	**125.06**	**188.4**	**39.5**	**67**	**8.7**	**27.1**	**14.6**	**36.73**	**20.4**	**37.5**	**0.5**	**37**	**2.1**	

NPDES Chemical Summary 2003

	Flow		NH3	max	F	max	BOD5	max	TSS	mx	Cl2	FC	
Jan	90	117.7	47.6	72.9	8.3	14.9	13.4	26.2	12.7	27	0.7		2
Feb	110	165.7	44.9	81.1	7.8	17.1	17.3	21.2	8.7	13.8	0.2		2
Mar	139.6	167.8	28.7	43.1	11.6	22.7	21.5	31.6	8.5	9.2	0.4		2
apr	146.4	187.1	11.5	33.2	7.2	12.3	17.6	43.4	8.9	12.5	0.2		2
May	155.3	273	9	29.9	9.7	22.8	21.8	49.4	11.8	13.9	0.1		2
June	160.8	183.5	11.8	16.8	6.7	9.9	19.5	33.1	15.9	24	0.2		2
Jul	150.6	215.7	10.6	24.6	10.2	16.6	32.2	58.7	7.4	11.9	0.1		2
Aug	146.8	218.2	15.5	41.8	9.2	17.2	22.5	35.4	18.7	41.9	0.1		2
Sept	134.7	169.2	18	48.7	9.2	19	23.3	46.1	9.8	19.6	0.1		2
Oct	116.5	164.8	13.9	25.7	4.1	8.6	18.7	27.7	8.1	12.2	0.1		2
Nov	82.59	168.2	26.59	67.6	2.6	7.44	6.27	11.25	4.16	6.65	0.1		2
Dec	127.46	205.2	46.47	74.08	3.44	5.35	8.67	16.3	8.28	19.17	0.3		2
	1560.75	2236.1	284.56	559.48	90.04	173.89	222.74	400.35	122.94	211.82	2.6		2
AVG	**130.30**	**184.63**	**21.64**	**44.13**	**7.87**	**15.32**	**19.46**	**34.91**	**10.42**	**17.51**	**0.21**		**2.00**
MAX	**160.8**	**273**	**47.6**	**81.1**	**11.6**	**22.8**	**32.2**	**58.7**	**18.7**	**41.9**	**0.7**		**2**

NPDES Chemical Summary 2002

	Flow	max	NH3	max	F	max	BOD5	max	TSS	Cl2	FC	
Dec	127	159.8	44.4	76.1	9.7	20.1	17.99	29	9.2	0.2		2
Nov	119.15	173.6	26.6	47.8	11.6	23.2	18.27	30.8	6.8	0.9		2
Oct	137.45	180.1	16.6	27.1	10.4	16.4	15.47	44.4	13.8	0.3		2
Sept	136.57	178.9	7.2	13	7.6	13	34.48	94	25.6	0.9		2
Aug	135.46	175.5	6.6	13.9	12.3	20.8	11.7	17.4	21.6	0.1		2
July	136.97	176.8	9.7	19.9	8	15.7	9.99	12.9	17.9	0.1		2
June	95.08	150.4	21.2	42.5	10.1	21	26.89	40.6	11.6	0.2		2
May	120.76	159.5	22	57.3	7.8	13.3	24.8	32	24	0.2		2
Apr	112.2	154	17	26.2	8.8	14.1	24.9	45.3	19.4	0.1		2
Mar	100.5	165.3	17.2	37.2	6.5	15.6	18.6	49.6	9.1	0.1		2
Feb	107.9	159.9	19	37.8	7.4	13.9	15.9	37.4	17.2	0.3		2
Jan	116.1	149.6	38.4	70.7	7.4	16.1	9.4	16.6	4.7	0.1		2
	1445.14	1983.4	245.9	469.5	107.6	203.2	228.39	450	180.9	3.5		2
AVG	**120.43**	**165.28**	**20.49**	**39.13**	**8.97**	**16.93**	**19.03**	**37.50**	**15.08**	**0.29**		**2**
MAX	**137.45**	**180.1**	**44.4**	**76.1**	**12.3**	**23.2**	**34.48**	**94**	**25.6**	**0.9**		**2**

NPDES Chemical Summary 2001

	Flow	Flow max	NH3	max	F	max	BOD5	max	TSS	Cl2	FC	
Jan	113.7	151.4	45.2	75	3.8	6.3	16.7	36.8	5	0.5	2	
Feb	119.1	167.8	35.6	61.8	6.7	10	10.6	12.1	5.6	0.2	2	
Mar	137.1	181.7	41.2	65.8	8.3	17.8	23.5	41	6.6	0.1	2	
apr	121.9	162.7	20.3	38.6	7.3	13.9	15.8	28	19.2	0.1	2	
May	118.3	192.1	11.1	23.8	8.1	22	20.1	35.9	18.7	0.1	2	
June	136.1	179.1	11.4	22.2	9	17.7	10.5	16.6	9.9	0.1	2	
Jul	160.6	196.3	14.6	24.1	9.8	18.1	13.6	22.7	13.1	0.1	2	
Aug	131.3	198.5	18.8	39.2	9.3	15.4	24.9	46	20.5	0.3	2	
Sept	115.9	115.9	18.3	35.5	7	11.8	19.9	38.3	10.3	0.2	138	
Oct	115.3	167.4	19.7	31.8	9	15	24.9	36.4	7.5	0.5	2	
Nov	114.6	168.1	24.5	40.6	6	12.3	6.8	11.1	5.8	0.3	2	
Dec	121	221.4	37.5	73.9	7.9	18.5	18.7	42.5	9.9	0.5	2	
	1504.9	2102.4	298.2	532.3	92.2	178.8	206	367.4	132.1	3	2	
AVG	**125.41**	**175.20**	**24.85**	**44.36**	**7.68**	**14.90**	**17.17**	**30.62**	**11.01**	**0.25**	**13.33**	
MAX	**160.6**	**221.4**	**45.2**	**75**	**9.8**	**22**	**24.9**	**46**	**20.5**	**0.5**	**138**	

RAI-7 Attachment

Stormwater Monitoring 2000

Date	Road		
2/16/2000	pH	NH3	F
2/23/2000	6.2	1	0.5
3/1/2000	6.87	6.81	0.5
3/8/2000	6.57	1	0.5
3/15/2000	6.3	1	0.5
3/22/2000	6.17	1	0.5
3/29/2000	6.43	1	0.5
4/5/2000	6.41	1	0.4
5/3/2000	6.06	1	0.4
5/10/2000	6.59	1	1.81
5/17/2000	6.39	1	1.78
5/24/2000	6.58	1	2.39
5/31/2000	6.69	2.42	2.93
6/7/2000	7.09	10	2.56
6/14/2000	6.07	1	1.27
6/21/2000	6.75	1	1.93
6/28/2000	6.38	1.76	1.6
7/5/2000	6.17	1	1.35
7/12/2000	6.14	1.13	1.52
7/19/2000	6.49	1.24	1.38
7/26/2000	6.75	0.5	2.3
8/4/2000	5.98	1.56	0.5
8/9/2000	6.14	1	0.5
8/16/2000	6.18	1	0.62
8/23/2000	6.29	1	0.99
8/30/2000	7.04	0.06	1.33
9/6/2000	7.43	1	0.5
9/13/2000	5.96	1	0.5
9/20/2000	6.33	1	0.82
9/27/2000	6.24	1	0.78
10/4/2000	6.41	1	0.47
10/11/2000	7.49	1	3.62
10/18/2000	7.53	1	4.04
10/25/2000	7.17	1	3.11
11/1/2000	7.08	1	2.8
11/8/2000	7.03	1	2.01
11/15/2000	6.75	1	2.98
12/6/2000	6.09	1	0.62
12/27/2000	7.07	1	2.2
12/31/2000	6.82	1	1.86
Min	6.56	1.43	1.45
Avg	6.57	1.42	1.46
Max	7.53	10.00	4.04

Storm Water Monitoring Water 2001

Date	Road pH	NH3	F
01/03/01	7.47	1.1	1.46
01/10/01	6.53	1	0.7
01/17/01	6.51	1	1.48
01/24/01	6.85	3	0.85
1/31/2001	6.83	0.19	2.8
02/07/01	6.95		1.48
02/14/01	6.31	1	0.8
02/21/01	6.5	1.5	0.86
2/28/2001	6.28	0.19	0.9
03/07/01	6.32	1	0.9
03/14/01	6.08	1	0.4
03/21/01	6.1	1	0.4
3/28/2001	6.9	1	0.5
04/04/01	6.65	0.19	0.8
4/18/2001	6.4	0.58	1.54
04/25/01	6.35	1	0.5
05/02/01	7.34	0.04	2.95
05/09/01	7.38	0.02	3.24
05/16/01	6.73	1	0.4
5/23/2001	6.79	0.1	0.56
06/01/01	7.11	1	0.7
06/06/01	6.35	1	0.33
06/13/01	6.88	1	0.4
06/20/01	7.02	1	37.1
6/27/2001	7.04	1	0.4
07/05/01	6.58	1	0.52
07/11/01	6.53	0.22	13.1
07/18/01	7.44	1	2.89
7/25/2001	6.88	1	1.7
08/01/01	6.88	1	1.7
08/08/01	7.33	1	2.76
08/15/01	6.65	1	2.25
08/22/01	6.54	1	2.55
8/29/2001	6.44	1	0.5
09/05/01	7.38	1	0.6
09/11/01	6.96	1	0.7
09/19/01	6.64	1	1.68
9/26/2001	7.84	1	1.85
10/03/01	7.22	1	0.9
10/10/01	7.45	1	2.72
10/17/01	6.81	1	2.03
10/24/01	6.84	1	2.44
10/31/01	7.1	1	2.14
11/07/01	6.99	1	1.9
11/14/01	7.38	1	5
11/21/01	6.88	1	2.56
11/28/01	7.16	1	3.18
12/05/01	7.33	2.48	2.54
12/12/01	6.86	1	0.99
12/19/01	7.53	1	0.99
12/26/2001	6.54	10	10
Min	6.08	0.02	0.33
Avg	6.86	1.13	2.60
Max	7.84	10.00	37.10

Stormwater Monitoring 2002

Date	Road		
	pH	NH3	F
1/2/2002	6.69	1	0.55
1/9/2002	7.12	1	0.84
1/16/2002	6.74	1	0.82
1/23/2002	6.07	10	10
1/30/2002	7.05	10	10
2/6/2002	7.65	1	2.12
2/13/2002	8.11	1	1.89
2/20/2002	6.91	1	1.8
2/27/2002	7.23	1	1.58
3/6/2002	6.97	1	3.8
3/13/2002	6.71	0.11	3.65
3/15/2002	6.71	1	0.5
3/20/2002	6.81	1	1.51
3/27/2002	6.97	24.4	0.64
4/3/2002	7.16	2.69	25.1
4/10/2002	6.77	1	0.5
4/17/2002	6.95	1	36.1
4/24/2002	6.86	1	2
5/1/2002	6.56	1	2.09
5/8/2002	6.62	1	1.73
5/15/2002	6.93	1	0.78
5/22/2002	6.75	1	1.64
5/29/2002	6.49	1	1.6
6/5/2002	6.43	1	1.52
6/12/2002	6.62	1	1.5
6/19/2002	6.42	1.14	1.93
6/26/2002	7.08	1	1.49
7/3/2002	6.23	1	1.08
7/10/2002	6.24	1	0.72
7/17/2002	6.67	2.25	1.02
7/24/2002	6.59	1	1.65
7/31/2002	6.84	2.95	2.23
8/7/2002	6.26	3.31	1.3
8/14/2002	6.49	3.19	1.28
8/21/2002	6.75	2.69	0.4
8/28/2002	6.53	1	1.34
9/4/2002	6.58	1	1.4
9/11/2002	7.03	1	0.53
9/18/2002	6.26	1	0.52
9/25/2002	7.34	1	0.53
10/2/2002	6.77	12.2	1.53
10/9/2002	6.9	1	0.4
10/16/2002	6.24	1	0.4
10/23/2002	6.29	1	0.5
10/30/2002	6.55	1	0.4
11/6/2002	6.06	1	0.4
11/13/2002	6.03	1	0.4
11/20/2002	6.07	1	0.56
11/27/2002	6.09	1	0.68
12/4/2002	6.26	0.05	1
12/11/2002	6.39	0.5	1
12/18/2002	6.48	0.5	1
12/26/2002	6.28	2.31	0.95
Min	6.03	0.05	0.4
Avg	6.67	2.18	2.66
Max	8.11	24.40	36.10

Stormwater Monitoring 2003

Date	Road pH	NH3	F
1/2/2003	6.6	2.44	0.8
1/8/2003	7.15	1	1.79
1/15/2003	7.11	1	1.44
1/22/2003	6.9	1	0.51
1/29/2003	6.37	2	0.54
2/5/2003	6.38	1	0.5
2/12/2003	6.21	1	0.4
2/19/2003	5.94	1	0.4
3/14/2003	6.13	1	0.5
3/21/2003	6.37	1	0.4
4/11/2003	6.25	1	0.5
4/16/2003	6.76	1	0.4
5/30/2003	7.08	1	0.4
6/12/2003	6.1	1	0.26
6/27/2003	4.37	1	0.58
6/30/2003	5.23	1	0.4
7/9/2003	4.14	1	0.4
7/23/2003	6.75	1	0.44
8/27/2003	7.32	1	0.4
9/18/2003	7.17	1	0.4
9/25/2003	6.95	2.55	0.77
10/1/2003	6.53	1	3.2
10/8/2003	4.23	1	0.5
10/15/2003	6.83	1	0.5
10/24/2003	6.57	1.87	1.65
10/31/2003	6.62	1	0.5
11/5/2003	6.9	1.16	5.59
11/12/2003	7.04	1.89	1.61
11/19/2003	7.35	2.04	1.58
11/26/2003	7.03	1	3.5
12/5/2003	2	1.02	0.4
12/10/2003	6.07	1	0.4
12/31/2003	7.1	1	0.5
Min	2	1	0.26
Avg	6.29	1.21	0.97
Max	7.35	2.55	5.59

Stormwater Monitoring 2004

Date	Road pH	NH3	F
1/8/04	6.96	1.97	1.81
1/14/2004	7.2	1.5	2.09
1/21/2004	7.42	1.7	1.62
1/28/04	6.87	1	0.4
1/30/04	6.67	1	0.4
2/4/2004	7.05	1	0.7
2/11/2004	6.25	1	0.4
2/20/2004	6.26	1	0.4
2/28/2004	6.54	1	0.41
3/3/2004	6.81	1	0.4
3/10/2004	7.47	1	0.26
3/16/2004	6.87	1	1
3/26/2004	7	1	0.86
3/31/2004	7.41	1	0.78
4/21/2004	6.51	1	0.5
4/30/2004	7.42	1	0.9
5/5/2004	7.09	1	0.4
5/19/2004	7.07	1	0.5
6/2/2004	6.67	1	0.5
6/16/2004	6.55	1	0.4
6/30/2004	6.74	1	0.93
7/7/2004	6.72	1	0.82
7/21/2004	6.77	1	0.5
7/28/2004	6.52	1.4	0.59
8/4/2004			
8/11/2004	6.99	1.68	2.08
8/18/2004	6.85	1	1.5
8/25/2004	5.48	1	0.7
9/1/2004	6.56	1	0.75
9/8/2004	6.4	1	0.4
9/15/2004	7.1	1.37	1.6
9/22/2004	6.88	1	1.4
9/29/2004	6.8	2	0.5
10/6/2004	6.96	1.4	1.28
10/13/2004	6.53	4.33	1.23
20-Oct	6.84	2.65	1.69
10/27/2004	6.96	5.62	2.04
11/3/2004	6.84	2.47	2.16
11/10/2004	6.76	2.44	2.25
11/17/2004	7	1.88	1.5
11/24/2004	6.34	1	0.6
12/1/2004	6.59	1	0.5
12/8/2004	6.97	1.77	1.66
12/15/2004	6.94	2.9	2.3

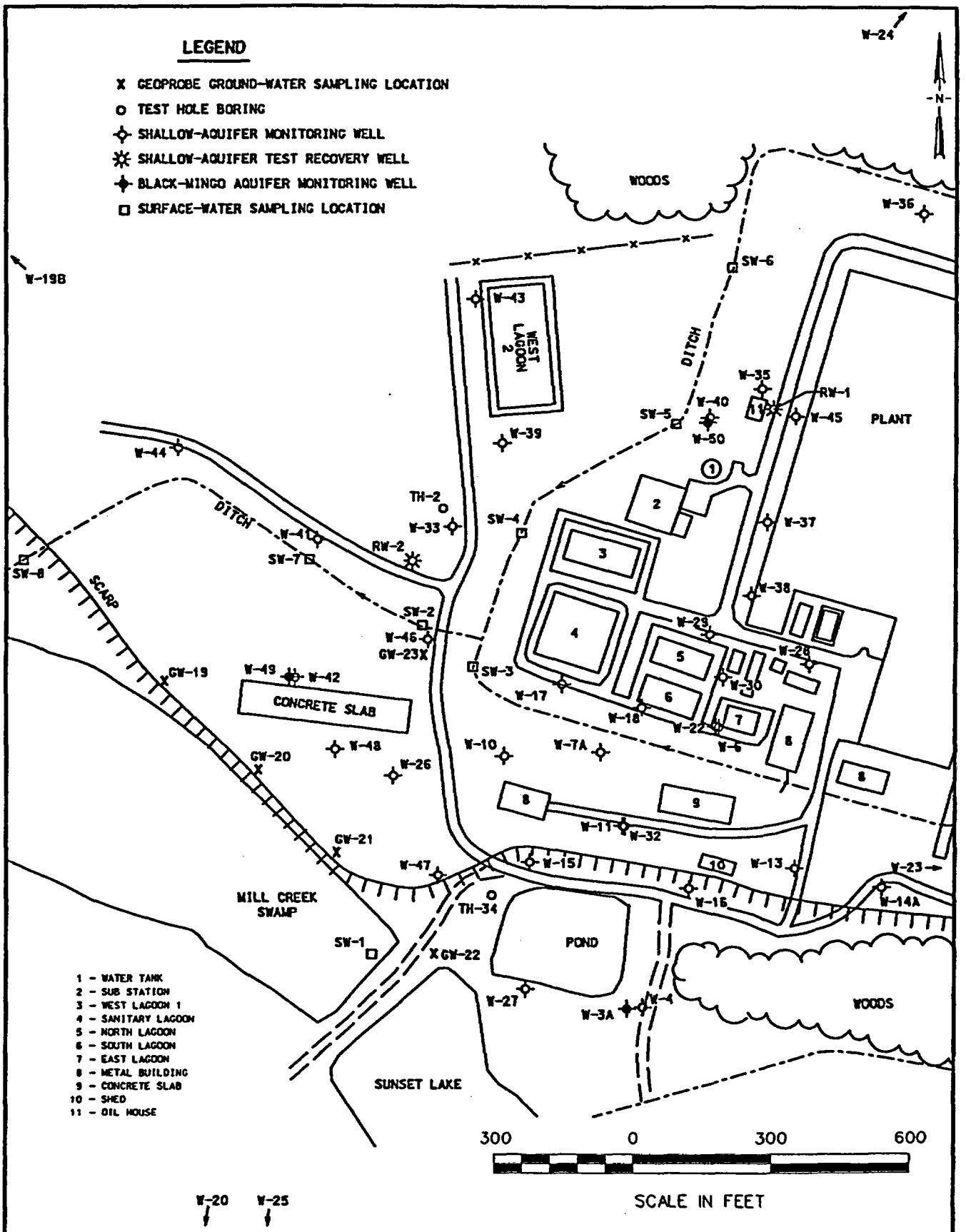
12/22/2004	5.92	1	1.7
12/29/2004	3.17	1	0.45
Min	3.17	1	0.26
Avg	6.70	1.47	1.02
Max	7.47	5.62	2.30

Stormwater Monitoring 2005

Date	Road pH	NH3	F
01/19/05	6.93	1.55	0.88
01/26/05	6.87	1.27	1
02/02/05	6.85	1	0.48
02/09/05	6.67	1	0.4
02/16/05	7.01	3	1
02/23/05	6.58	1	0.4
03/09/05	6.7	1	0.5
03/16/05	6.48	1	0.4
03/23/05	7.04	1	0.4
03/30/05	6.35	1	0.4
04/06/05	6.81	1	0.4
04/13/05	6.64	1	0.4
04/20/05	6.97	1	0.55
04/27/05	6.67	1	0.4
05/11/05	7.1	1	0.7
05/18/05	6.83	1	1.33
05/25/05	6.94	2	1.84
06/08/06	6.65	1	0.4
06/15/06	6.76	1	0.4
06/29/05	6.63	1	0.5
07/06/05	6.63	1	0.52
07/13/05	6.94	1.56	0.99
07/20/05	6.53	1	0.62
07/26/05	6.57	1	0.54
08/03/05	6.47	1	0.46
08/10/06	6.35	1	0.4
08/31/06	5.64	1	0.5
09/07/05	6.8	1	0.79
10/05/05	6.96	1.83	1.11
10/12/05	6.91	2.79	0.47
10/19/05	7.12	2.97	0.7
10/26/05	7.27	1	1.66
11/09/05	7.46	1.99	2.33
11/23/05	6.7	1	0.52
12/07/05	6.93	1	10.9
12/14/05	7.18	1	0.5

12/21/05	6.79	1	0.7
12/28/05	6.85	1	0.72
Min	5.64	1	0.4
Avg	6.78	1.26	0.98
Max	7.46	3.00	10.90

RAI-9 Attachment



WESTINGHOUSE ELECTRIC CORPORATION, COLUMBIA, SOUTH CAROLINA, PROJECT NO. 33143.500

RUST ENVIRONMENT & INFRASTRUCTURE

FIGURE 1-3
FACILITIES MAP WITH SAMPLING LOCATIONS

Westinghouse

Westinghouse Electric Company
Nuclear Fuel
Columbia Fuel Site
P.O. Drawer R
Columbia, South Carolina 29250
USA

South Carolina Department of Health
And Environmental Control
Compliance Assurance Division
Bureau of Water
Attn: Mr. Bruce Crawford
2600 Bull Street
Columbia, South Carolina 29201

Direct tel: 803-647-3671
Direct fax: 803-695-3964
e-mail: fischere@westinghouse.com

Your ref:
Our ref: LTR-EHS-06-025

Subject: NPDES Permit #SC0001848
Ground Water Sampling

Date: January 25, 2006

Dear Mr. Bruce Crawford:

Enclosed are the results from the semi-annual groundwater sampling survey initiated in December 2005. Please contact me at (803) 647-3671 if you have any questions regarding these results.

Sincerely,

WESTINGHOUSE ELECTRIC COMPANY

Roger E. Fischer, Sr. Engineer
Environment Health & Safety

Enclosures/VOC Vendor Reports

dom

Our ref: LTR-EHS-06-025
Date: January 25, 2006

WESTINGHOUSE ELECTRIC COMPANY

COLUMBIA, SOUTH CAROLINA

GROUND WATER CHEMICAL REPORT

DECEMBER 8, 2005

Well	pH	F; mg/l	NH_3(N), mg/l	NO_3, mg/l
W7	7.3	17.7	39.8	240
W10	6.0	7.0	6.9	29.8
W13	7.6	<0.5	<1.0	16.6
W15	6.7	6.2	15.1	18.4
W16	7.0	12.1	19.7	5.9
W18	6.5	15.9	<1.0	55.9
W22	NA	NA	NA	NA
W24	5.8	<0.5	<1.0	2.1
W26	5.3	3.0	<1.0	1.0
W29	6.7	9.4	9.1	37.5
W30	6.5	15.6	<1.0	476
W32	5.9	<0.5	1.4	49.6
W41	5.8	<0.4	<1	41.7
W48	5.3	<0.4	<1	8.7
WRW-2	5.3	<0.5	<1.0	510

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Well	Well Water Depth	Conductivity
W7	10.8	958
W10	17.2	354
W13	2.7	194
W15	11.4	401
W16	4.7	115
W18	13.1	NA
W22	NA	NA
W24	9.1	105
W26	24.7	166
W29	11.1	487
W30	11.2	455
W32	17.7	434
W41	13.9	356
W48	24.4	121
WRW-2	16.0	1284

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USA

WESTINGHOUSE ELECTRIC COMPANY
COLUMBIA, SOUTH CAROLINA
GROUND WATER RADIOLOGICAL REPORT

uCi/ml x 10^{-6}

December 8, 2005

Well	Gross Alpha	Gross Beta
W7	0.008	0.240
W10	0.004	0.058
W13	0.003	0.003
W15	0.006	0.158
W16	0.001	0.021
W18	0.155	0.119
W22	NA	NA
W24	0.000	0.003
W26	0.001	0.015
W29	0.004	0.019
W30	0.035	0.064
W32	0.008	1.81
W41	0.003	0.022
W48	0.000	0.011
WRW-2	0.028	0.184

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Nuclear Fuel
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P.O. Drawer R
Columbia, South Carolina 29250
USA

South Carolina Department of Health
And Environmental Control
Compliance Assurance Division
Bureau of Water
Attn: Mr. Bruce Crawford
2600 Bull Street
Columbia, South Carolina 29201

Direct tel: 803-647-3671
Direct fax: 803-695-3964
e-mail: fischere@westinghouse.com

Your ref:
Our ref: LTR-EHS-05-346

Subject: NPDES Permit #SC0001848
Ground Water Sampling

Date: September 26, 2005

Dear Mr. Bruce Crawford:

Enclosed are the results from the semi-annual groundwater sampling survey initiated in June 2005. Please contact me at (803) 647-3671 if you have any questions regarding these results.

Sincerely,

WESTINGHOUSE ELECTRIC COMPANY

Roger E. Fischer, Sr. Engineer
Environment Health & Safety

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COLUMBIA, SOUTH CAROLINA

GROUND WATER CHEMICAL REPORT

JUNE 8, 2005

Well	pH	F; mg/l	NH_3(N), mg/l	NO_3, mg/l
W7	6.7	16.0	45.8	41.5
W10	4.1	1.7	4.7	22.9
W13	7.4	<0.5	<1.0	6.9
W15	6.0	4.6	<1.0	16.5
W16	6.9	0.9	<1.0	5.2
W18	Dry	NA	NA	NA
W22	6.1	<0.5	<1.0	2.5
W24	5.9	<0.5	<1.0	2.2
W26	5.4	3.5	<1.0	6.0
W29	6.5	7.0	6.8	18.5
W30	6.2	10.0	30.6	521
W32	5.2	<0.5	<1.0	46
W41	5.7	<0.4	<1	35.1
W48	5.4	<0.5	<1	7.8
WRW-2	5.3	<0.5	<1.0	153

Westinghouse Electric Company
Nuclear Fuel
Columbia Fuel Site
P.O. Drawer R
Columbia, South Carolina 29250
USA

Well	Well Water Depth	Conductivity
W7	10.8	958
W10	17.7	354
W13	2.1	194
W15	11.8	401
W16	1.9	115
W18	NA	NA
W22	9.1	40
W24	9.9	105
W29	11.6	487
W30	11.8	455
W32	18.4	434
W26	25.6	166
W41	16.1	356
W48	26.4	121
WRW-2	18.1	1284

Page 3 of 3
Westinghouse Electric Company
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Columbia, South Carolina 29250
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WESTINGHOUSE ELECTRIC COMPANY
COLUMBIA, SOUTH CAROLINA
GROUND WATER RADIOLOGICAL REPORT
uCi/ml x 10^{-6}
June 8, 2005

Well	Gross Alpha	Gross Beta
W7	0.005	0.175
W10	0.007	0.028
W13	0.000	0.001
W15	0.001	0.005
W16	0.004	0.014
W18	NA	NA
W22	0.000	0.007
W24	0.000	0.009
W26	0.002	0.010
W29	0.004	0.009
W30	0.045	0.061
W32	0.070	1.02
W41	0.003	0.023
W48	0.000	0.011
WRW-2	0.011	0.099

Westinghouse Electric Company
Nuclear Fuel
Columbia Fuel Site
P.O. Drawer R
Columbia, South Carolina 29250
USA

South Carolina Department of Health
And Environmental Control
Compliance Assurance Division
Bureau of Water
Attn: Mr. Bruce Crawford
2600 Bull Street
Columbia, South Carolina 29201

Direct tel: 803-647-3671
Direct fax: 803-695-3964
e-mail: fischere@westinghouse.com

Your ref:
Our ref: LTR-EHS-05-68

Subject: NPDES Permit #SC0001848
Ground Water Sampling

Date: February 10, 2005

Dear Mr. Bruce Crawford:

Enclosed are the results from the semi-annual groundwater sampling survey initiated in December 2004. Please contact me at (803) 647-3671 if you have any questions regarding these results.

Sincerely,

WESTINGHOUSE ELECTRIC COMPANY

Roger E. Fischer, Sr. Engineer
Environment Health & Safety

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WESTINGHOUSE ELECTRIC COMPANY

COLUMBIA, SOUTH CAROLINA

GROUND WATER CHEMICAL REPORT

DECEMBER 12, 2004

Well	pH	F; mg/l	$NH_3(N)$, mg/l	NO_3, mg/l
W7	7.6	19.6	<1.0	38.8
W10	6.0	5.6	6.9	25.0
W13	7.6	0.5	<1	8.1
W15	6.3	7.2	17.2	15.9
W16	6.6	13.0	23.6	4.6
W18	Dry	NA	NA	NA
W22	5.8	<0.4	6.9	37.0
W24	7.3	<0.4	<1.0	2.8
W26	5.4	3.5	<1.0	5.8
W29	6.8	9.6	9.4	27.7
W30	6.4	19.2	32.6	380
W32	6.1	<0.4	<1.0	37.7
W41	5.7	<0.4	<1	36.4
W48	5.4	<0.4	<1	7.8
WRW-2	5.9	0.4	<1	54.9

Westinghouse Electric Company
Nuclear Fuel
Columbia Fuel Site
P.O. Drawer R
Columbia, South Carolina 29250
USA

Well	Well Water Depth	Conductivity
W7	9.2	988
W10	14.6	420
W13	9.3	210
W15	14.9	377
W16	2.6	429
W18	NA	NA
W22	8.8	349
W24	8.1	100
W29	9.9	542
W30	9.9	3160
W32	15.8	410
W26	26.2	161
W41	16.4	405
W48	27.1	123
WRW-2	18.8	556

Westinghouse Electric Company
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Columbia, South Carolina 29250
USA

WESTINGHOUSE ELECTRIC COMPANY
COLUMBIA, SOUTH CAROLINA
GROUND WATER RADIOLOGICAL REPORT

uCi/ml x 10^{-6}

December 12, 2004

Well	Gross Alpha	Gross Beta
W7	0.009	0.097
W10	0.006	0.025
W13	0.002	0.013
W15	0.001	0.062
W16	0.001	0.017
W18	NA	NA
W22	0.006	0.144
W24	0.000	0.009
W26	0.001	0.011
W29	0.002	0.007
W30	0.021	0.064
W32	0.075	0.546
W41	0.002	0.008
W48	0.001	0.004
WRW-2	0.007	0.015

REF-04-014
March 8, 2004

South Carolina Department of Health
and Environmental Control
Enforcement Division
Bureau of Water Pollution Control
2600 Bull Street
Columbia, SC 29201

Dear Sirs:

Enclosed are the results from the quarterly groundwater sampling survey conducted March 27, 2002. Please contact me at (803) 647-3671 if you have any questions regarding these results.

Sincerely,

WESTINGHOUSE ELECTRIC COMPANY

Roger E. Fischer, Sr. Engineer
Integrated Safety Engineering

Enclosure

WESTINGHOUSE COMMERCIAL NUCLEAR FUEL DIVISION

COLUMBIA, SOUTH CAROLINA

SPECIAL GROUND WATER CHEMICAL REPORT

MARCH 27, 2002

TABLE 1

Well	pH	F; mg/l	$NH_3(N)$, mg/l
W7	7.5	20.1	38
W10	5.7	9.8	2.7
W13	7.5	<1.0	<1
W15	6.3	2.6	15
W16	6.8	9.4	25.8
W22	4.4	<1.0	2.4
W24	5.6	<1.0	<1.0
W29	6.4	5.9	10.1
W30	6.0	<1.0	<1.0
W32	6.1	<1	<1.0

TABLE II

Well	Well Water Depth	Conductivity
W7	12'9"	990
W10	20'1"	460
W13	4'1"	270
W15	14'2"	415
W16	2'6"	500
W22	11'9"	790
W24	10'2"	80
W29	13'7"	640
W30	13'8"	1300
W32	20'2"	260

WESTINGHOUSE ELECTRIC COMPANY

COLUMBIA, SOUTH CAROLINA

SPECIAL GROUND WATER RADIOLOGICAL REPORT

uCi/ml x 10^{-6}

MARCH 27, 2002

Well	Gross Alpha	Gross Beta
W7	0.002	0.309
W10	0.002	0.095
W13	0.003	0.006
W15	0.001	0.254
W16	0.001	0.033
W22	0.045	2.7
W24	0.001	0.003
W29	0.003	0.014
W30	0.014	0.114
W32	0.009	1.68

WESTINGHOUSE ELECTRIC COMPANY

COLUMBIA, SOUTH CAROLINA

SPECIAL GROUND WATER CHEMICAL REPORT

MARCH 27, 2002

SUPPLEMENTAL LISTING

uCi/ml x 10^{-6}

Well	Gross Alpha	Gross Beta
W3A	0.001	0.000
W14	0.002	0.010
W19	0.002	0.001
W20	0.0002	0.001
W23	0.001	0.002
W26	0.002	0.021
W27	0.000	0.008
W28	0.003	0.014
W33	0.001	0.014
W37	0.001	0.002
W38	0.001	0.004

WESTINGHOUSE ELECTRIC COMPANY

COLUMBIA, SOUTH CAROLINA

SPECIAL GROUND WATER CHEMICAL REPORT

MARCH 27, 2002

SUPPLEMENTAL LISTING

TABLE 1

Well	pH	F; mg/l	NH_3(N), mg/l	Conductivity
W3A	5.8	<1	<1	24
W14	6.4	<1	<1	440
W19B	5.7	<1	<1	110
W20	5.7	<1	<1	110
W23	6.1	<1	<1	130
W26	5.1	6.5	<1	550
W27	6.4	2.1	<1	240
W28	5.8	75	<1	620
W33	6.1	<1	<1	170
W37	6.7	<1	<1	150
W38	6.4	<1	<1	980

TABLE II

Well	Well Water Depth
W3A	4'2"
W14	19'8"
W19B	28'7"
W20	9'2"
W23	21'2"
W26	28'3"
W27	12'5"
W28	13'6"
W33	17'8"
W37	13"3"
W38	14"5"

REF-04-008
March 8, 2004

South Carolina Department of Health
and Environmental Control
Enforcement Division
Bureau of Water Pollution Control
2600 Bull Street
Columbia, SC 29201

Dear Sirs:

Enclosed are the results from the quarterly groundwater sampling survey conducted March 30, 2001. Please contact me at (803) 647-3671 if you have any questions regarding these results.

Sincerely,

WESTINGHOUSE ELECTRIC COMPANY

Roger E. Fischer, Sr. Engineer
Integrated Safety Engineering

Enclosure

WESTINGHOUSE COMMERCIAL NUCLEAR FUEL DIVISION

COLUMBIA, SOUTH CAROLINA

SPECIAL GROUND WATER CHEMICAL REPORT

MARCH 30, 2001

TABLE 1

Well	pH	F; mg/l	NH_3(N), mg/l
W7	8.5	24.6	63.6
W10	4.4	8.3	<1
W13	7.4	<1	<1
W15	6.8	3.5	10.1
W16	6.9	1.2	<1
W22	5.9	<1.0	<1.0
W24	6.0	<1.0	<1.0
W29	6.6	8.2	3.3
W30	6.8	29.7	44.4
W32	5.2	<1	<1

TABLE II

Well	Well Water Depth	Conductivity
W7	12'9"	1040
W10	20'1"	365
W13	4'1"	136
W15	14'2"	415
W16	2'6"	170
W22	11'9"	550
W24	10'2"	82
W29	13'7"	600
W30	13'8"	1575
W32	20'2"	330

WESTINGHOUSE ELECTRIC COMPANY

COLUMBIA, SOUTH CAROLINA

SPECIAL GROUND WATER RADIOLOGICAL REPORT

uCi/ml x 10^{-6}

MARCH 30, 2001

Well	Gross Alpha	Gross Beta
W7	0.003	0.311
W10	0.002	0.072
W13	0.002	0.003
W15	0.012	0.276
W16	0.005	0.015
W22	0.060	1.19
W24	0.001	0.001
W29	0.004	0.015
W30	0.026	0.056
W32	0.030	1.65

WESTINGHOUSE ELECTRIC COMPANY

COLUMBIA, SOUTH CAROLINA

SPECIAL GROUND WATER CHEMICAL REPORT

MARCH 30, 2001

SUPPLEMENTAL LISTING

uCi/ml x 10^{-6}

Well	Gross Alpha	Gross Beta
W3A	0.001	0.003
W14	0.001	0.006
W19	0.005	0.015
W20	0.000	0.002
W23	0.014	0.034
W26	0.002	0.037
W27	0.000	0.002
W28	0.004	0.014
W33	0.001	0.006
W37	0.001	0.000
W38	0.003	0.006

WESTINGHOUSE ELECTRIC COMPANY

COLUMBIA, SOUTH CAROLINA

SPECIAL GROUND WATER CHEMICAL REPORT

MARCH 30, 2001

SUPPLEMENTAL LISTING

TABLE 1

Well	pH	F; mg/l	$NH_3(N)$, mg/l	Conductivity
W3A	5.6	<1	<1	24
W14	6.4	<1	<1	280
W19B	6.6	<1	<1	150
W20	5.8	<1	<1	100
W23	6.4	<1	<1	140
W26	5.0	5.7	<1	250
W27	6.5	1.8	4.6	280
W28	6.1	68	<1	1210
W33	5.5	<1	<1	200
W37	5.9	<1	<1	158
W38	5.5	<1	<1	640

TABLE II

Well	Well Water Depth
W3A	4'2"
W14	19'8"
W19B	28'7"
W20	9'2"
W23	21'2"
W26	28'3"
W27	12'5"
W28	13'6"
W33	17'8"
W37	13"3"
W38	14"5"

Executive Summary
Westinghouse Electric Company
Lot Number: HF19026

6/30/06

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	RW-2	Aqueous	cis-1,2-Dichloroethene	8260B	2.4		ug/L	10
002	RW-2	Aqueous	Tetrachloroethene	8260B	190		ug/L	11
002	RW-2	Aqueous	1,1,2-Trichloroethane	8260B	1.4		ug/L	11
002	RW-2	Aqueous	Trichloroethene	8260B	9.6		ug/L	11
004	W-16	Aqueous	cis-1,2-Dichloroethene	8260B	34		ug/L	20
004	W-16	Aqueous	Tetrachloroethene	8260B	37		ug/L	21
004	W-16	Aqueous	Trichloroethene	8260B	9.0		ug/L	21
005	W-18	Aqueous	Tetrachloroethene	8260B	2.1		ug/L	26
006	W-26	Aqueous	cis-1,2-Dichloroethene	8260B	13		ug/L	30
006	W-26	Aqueous	Tetrachloroethene	8260B	2.2		ug/L	31
006	W-26	Aqueous	Trichloroethene	8260B	1.3		ug/L	31
007	W-33	Aqueous	cis-1,2-Dichloroethene	8260B	2.1		ug/L	35
007	W-33	Aqueous	Tetrachloroethene	8260B	530		ug/L	36
007	W-33	Aqueous	Trichloroethene	8260B	87		ug/L	36
008	W-37	Aqueous	Chloroform	8260B	2.7		ug/L	40
009	W-38	Aqueous	Chloroform	8260B	2.3		ug/L	45
009	W-38	Aqueous	Tetrachloroethene	8260B	2.1		ug/L	46
009	W-38	Aqueous	Trichloroethene	8260B	47		ug/L	46
010	W-41	Aqueous	cis-1,2-Dichloroethene	8260B	3.0		ug/L	50
010	W-41	Aqueous	Tetrachloroethene	8260B	300		ug/L	51
010	W-41	Aqueous	Trichloroethene	8260B	62		ug/L	51
011	W-48	Aqueous	cis-1,2-Dichloroethene	8260B	18		ug/L	55
011	W-48	Aqueous	Tetrachloroethene	8260B	380		ug/L	56
011	W-48	Aqueous	Trichloroethene	8260B	7.5		ug/L	56

(24 detections)

Executive Summary
Westinghouse Electric Company
Lot Number: GL19015
12/19/05

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	RW2	Aqueous	cis-1,2-Dichloroethene	8260B	1.7		ug/L	6
001	RW2	Aqueous	Tetrachloroethene	8260B	83		ug/L	7
001	RW2	Aqueous	Trichloroethene	8260B	7.2		ug/L	7
002	W16	Aqueous	cis-1,2-Dichloroethene	8260B	40		ug/L	11
002	W16	Aqueous	Tetrachloroethene	8260B	39		ug/L	12
002	W16	Aqueous	Trichloroethene	8260B	8.7		ug/L	12
003	W18	Aqueous	cis-1,2-Dichloroethene	8260B	1.0		ug/L	16
003	W18	Aqueous	Tetrachloroethene	8260B	4.3		ug/L	17
004	W26	Aqueous	cis-1,2-Dichloroethene	8260B	65		ug/L	21
004	W26	Aqueous	Tetrachloroethene	8260B	24		ug/L	22
004	W26	Aqueous	Trichloroethene	8260B	9.8		ug/L	22
005	W33	Aqueous	cis-1,2-Dichloroethene	8260B	1.6		ug/L	26
005	W33	Aqueous	Tetrachloroethene	8260B	360		ug/L	27
005	W33	Aqueous	Trichloroethene	8260B	61		ug/L	27
006	W38	Aqueous	Chloroform	8260B	5.4		ug/L	31
006	W38	Aqueous	Tetrachloroethene	8260B	2.5		ug/L	32
006	W38	Aqueous	Trichloroethene	8260B	45		ug/L	32
007	W39	Aqueous	Tetrachloroethene	8260B	140		ug/L	37
007	W39	Aqueous	Trichloroethene	8260B	7.2		ug/L	37
008	W41	Aqueous	cis-1,2-Dichloroethene	8260B	3.3		ug/L	41
008	W41	Aqueous	Tetrachloroethene	8260B	280		ug/L	42
008	W41	Aqueous	Trichloroethene	8260B	72		ug/L	42
009	W48	Aqueous	cis-1,2-Dichloroethene	8260B	22		ug/L	46
009	W48	Aqueous	Tetrachloroethene	8260B	370		ug/L	47
009	W48	Aqueous	Trichloroethene	8260B	10		ug/L	47

(25 detections)

Executive Summary
Westinghouse Electric Company
Lot Number: FL23001
12/22/04

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W 7A	Aqueous	Tetrachloroethene	8260B	1.3		ug/L	6
003	W 15	Aqueous	cis-1,2-Dichloroethene	8260B	2.2		ug/L	9
003	W 15	Aqueous	Tetrachloroethene	8260B	44		ug/L	10
003	W 15	Aqueous	Trichloroethene	8260B	3.8		ug/L	10
004	W 16	Aqueous	Carbon disulfide	8260B	2.1		ug/L	11
004	W 16	Aqueous	cis-1,2-Dichloroethene	8260B	56		ug/L	11
004	W 16	Aqueous	Tetrachloroethene	8260B	56		ug/L	12
004	W 16	Aqueous	Trichloroethene	8260B	11		ug/L	12
005	W 26	Aqueous	cis-1,2-Dichloroethene	8260B	28		ug/L	13
005	W 26	Aqueous	Tetrachloroethene	8260B	24		ug/L	14
005	W 26	Aqueous	Trichloroethene	8260B	4.8		ug/L	14
006	W 27	Aqueous	Carbon disulfide	8260B	1.5		ug/L	15
007	W 33	Aqueous	cis-1,2-Dichloroethene	8260B	2.8		ug/L	17
007	W 33	Aqueous	Tetrachloroethene	8260B	280		ug/L	18
007	W 33	Aqueous	Trichloroethene	8260B	50		ug/L	18
008	W 37	Aqueous	Chloroform	8260B	1.1		ug/L	19
009	W 38	Aqueous	Chloroform	8260B	11		ug/L	21
009	W 38	Aqueous	Tetrachloroethene	8260B	9.0		ug/L	22
009	W 38	Aqueous	Trichloroethene	8260B	100		ug/L	22
010	W 39	Aqueous	cis-1,2-Dichloroethene	8260B	1.2		ug/L	23
010	W 39	Aqueous	Tetrachloroethene	8260B	110		ug/L	24
010	W 39	Aqueous	Trichloroethene	8260B	7.1		ug/L	24
011	W 40	Aqueous	Tetrachloroethene	8260B	2.2		ug/L	26
012	W 41R	Aqueous	cis-1,2-Dichloroethene	8260B	3.7		ug/L	27
012	W 41R	Aqueous	Tetrachloroethene	8260B	320		ug/L	28
012	W 41R	Aqueous	Trichloroethene	8260B	54		ug/L	28
013	W 42	Aqueous	Carbon disulfide	8260B	1.2		ug/L	29
016	W 45	Aqueous	Benzene	8260B	1.9		ug/L	35
016	W 45	Aqueous	cis-1,2-Dichloroethene	8260B	1.6		ug/L	35
016	W 45	Aqueous	Ethylbenzene	8260B	1.6		ug/L	36
017	W 46	Aqueous	Tetrachloroethene	8260B	1.4		ug/L	38
019	W 48	Aqueous	cis-1,2-Dichloroethene	8260B	12		ug/L	41
019	W 48	Aqueous	Tetrachloroethene	8260B	290		ug/L	42
019	W 48	Aqueous	Trichloroethene	8260B	2.8		ug/L	42
020	RW 2R	Aqueous	Tetrachloroethene	8260B	52		ug/L	44
020	RW 2R	Aqueous	Trichloroethene	8260B	5.5		ug/L	44

(36 detections)

February 17, 2004

VOC's 2004- Well Analyses

Well	1-2 dichlorethene	chloroform	tetratchlorethene	benzene	Trichloroethene	ethybenzene	Total VOC
7							0
10							0
15	2		49		4.1		55.1
16	47		62		12		121.0
26			7.3				7.3
27							0.0
33	5.1		470		94		569.1
37							0.0
38		8.4	12		140		160.4
39	4.6		210		10		224.6
40							0.0
41	NA						0.0
42							0.0
43							0.0
44							0.0
45	1		1.7	2		2.5	7.2
46					1		1.0
47					1.7		1.7
48	12		320		2.9		334.9
						Avg	78.0
						Max	569.1

Table 1-1

SUMMARY OF MONITORING WELL DATA

Westinghouse Commercial Nuclear Fuel Division
Columbia, South Carolina

Project No. 33143.500

Well Number	Latitude (North)	Longitude (West)	Land Surface Elevation (Feet MSL)	Top Of Casing Elevation (Feet MSL)	Total Well Depth (Feet)	Casing Diameter	Casing Depth (Feet)	Screen Depth (Feet)	Date Completed
W-3A *	33 52 44.4	80 55 16.1	119.1	121.25	82.5	2 in.	72.5	82.5	06/11/85
W-4	33 52 44.4	80 55 15.7	117.8	117.28	12	4 in.	10	12	1977
W-6	33 52 50.5	80 55 13.8	138.2	137.73	28.5	2 in.	23.5	28.5	05/15/80
W-7A	33 52 50.0	80 55 16.8	134.3	136.36	18	2 in.	13	18	02/19/92
W-10	33 52 49.9	80 55 19.3	138.2	140.33	23.5	2 in.	18.5	23.5	05/14/80
W-11	33 52 48.4	80 55 16.2	139.5	141.50	28.5	2 in.	25.5	28.5	05/14/80
W-13	33 52 47.4	80 55 11.8	137.3	139.28	18.5	2 in.	15.5	18.5	05/14/80
W-14A	33 52 47.0	80 55 09.5	137.3	139.87	28.5	2 in.	23.5	28.5	05/04/88
W-15	33 52 47.6	80 55 18.6	127.5	129.17	18.5	2 in.	13.5	18.5	05/15/80
W-16	33 52 47.0	80 55 14.5	126.7	126.20	18.5	2 in.	15.5	18.5	05/15/80
W-17	33 52 51.5	80 55 17.8	138.8	140.58	28	2 in.	23.5	28	05/30/80
W-18	33 52 51.0	80 55 15.7	138.7	137.95	17.5	2 in.	12.5	17.5	07/08/80
W-19B	33 53 02.5	80 55 32.4	141.3	143.92	40.5	4 in.	30	40.5	03/17/95
W-20	33 52 38.4	80 55 27.4	113.9	116.11	16.3	2 in.	11.5	16.3	07/10/80
W-22	33 52 50.6	80 55 13.8	138.2	137.83	17.8	2 in.	13.4	17.8	07/12/80
W-23	33 52 47.7	80 55 05.2	138.7	140.51	20	2 in.	15	20	07/10/80
W-24	33 53 08.4	80 54 35.7	141.1	143.16	15.1	2 in.	10.1	15.1	07/09/80
W-25	33 52 22.3	80 55 30.2	115.9	117.26	27.7	2 in.	22.9	27.7	07/09/80
W-26	33 52 49.5	80 55 22.1	141.5	143.36	30.5	2 in.	25.5	30.5	07/11/80
W-27	33 52 44.8	80 55 18.7	121.5	123.24	18.9	2 in.	14.1	18.9	07/13/80
W-28	33 52 52.2	80 55 11.4	138.4	140.09	14.7	2 in.	9.8	14.7	07/13/80
W-29	33 52 52.7	80 55 14.0	138.2	139.85	15.1	2 in.	10	15.1	07/12/80
W-30	33 52 51.9	80 55 13.5	138.2	140.11	15.2	2 in.	10.2	15.2	07/11/80
W-32	33 52 48.3	80 55 16.1	139.6	141.78	22.5	2 in.	17	22.5	07/15/80
W-33	33 52 54.9	80 55 20.6	138.8	140.46	20.7	2 in.	15.1	20.7	07/15/80
W-35	33 52 58.0	80 55 12.6	138.1	140.35	21	2 in.	16	21	02/18/92
W-36	33 53 01.7	80 55 08.5	135.6	137.60	20	2 in.	15	20	02/19/92
W-37	33 52 55.0	80 55 12.5	138.0	140.35	20.5	2 in.	15.5	20.5	02/11/92
W-38	33 52 53.4	80 55 12.9	138.2	140.94	20	2 in.	15	20	02/18/92
W-39	33 52 56.7	80 55 19.3	139.5	142.44	22	2 in.	12	22	01/27/94
W-40	33 52 57.3	80 55 14.0	138.0	140.49	15	2 in.	5	15	07/18/84
W-41	33 52 54.6	80 55 24.1	132.2	134.86	24	2 in.	14	24	01/28/94
W-42	33 52 51.6	80 55 24.7	139.0	142.20	30	2 in.	20	30	01/27/94
W-43	33 52 59.9	80 55 20.0	139.6	142.58	20.5	2 in.	10.5	20.5	01/27/94
W-44	33 52 56.6	80 55 27.7	132.9	135.91	26	2 in.	16	26	02/01/94
W-45	33 52 57.3	80 55 11.8	138.7	141.43	16	2 in.	6	16	07/18/84
W-46	33 52 52.4	80 55 21.2	133.4	135.83	25.5	4 in.	15.5	25.5	03/27/95
W-47	33 52 47.3	80 55 21.0	140.7	143.13	44.8	4 in.	34.3	44.8	03/31/95
W-48	33 52 50.1	80 55 23.7	140.7	143.68	41.3	4 in.	30.7	41.3	03/30/95
W-49 *	33 52 51.6	80 55 24.8	138.9	141.57	115	2 in.	105	115	03/15/95
W-50 *	33 52 57.2	80 55 14.0	138.1	140.79	124.5	2 in.	114.5	124.5	03/21/95
RW-1	33 52 57.8	80 55 12.3	137.4	138.21	33	4 in.	19.2	30	04/01/95
RW-2	33 52 54.2	80 55 21.7	137.9	139.44	32.3	4 in.	19	29.2	03/10/95

Notes: * Black Mingo aquifer well.
MSL = Mean Sea Level
Elevations for wells W-20 and W-25 not resurveyed.
Wells W-3, W-5, W-7, W-8, W-9, W-12, W-14, W-19, W-19A, W-21, and W-31 have been abandoned.

Table 3-1

SUMMARY OF WATER LEVELS

Westinghouse Commercial Nuclear Fuel Division
Columbia, South Carolina

Project No. 33143.500

Well Number	Date Measured	Land Surface Elevation (Feet MSL)	Measuring Point Height (Feet)	Measuring Point Elevation (Feet MSL)	Water Level Below M.P. (Feet)	Water Level Below L.S. (Feet)	Water Level Elevation (Feet MSL)
W-35	02/09/94	138.1	2.25	140.35	12.48	10.2	127.87
	03/08/94				11.89	9.6	128.46
	04/18/95				10.24	8.0	130.11
W-36	02/09/94	135.6	2.00	137.60	9.76	7.8	127.84
	03/08/94				8.69	6.7	128.91
	04/18/95				6.85	4.9	130.75
W-37	02/09/94	138.0	2.35	140.35	12.64	10.3	127.71
	03/08/94				12.16	9.8	128.19
	04/18/95				10.69	8.3	129.66
W-38	02/09/94	138.2	2.74	140.94	13.42	10.7	127.52
	03/08/94				13.30	10.6	127.64
	04/18/95				12.83	10.1	128.11
W-39	02/09/94	139.5	2.94	142.44	16.45	13.5	125.99
	03/08/94				15.96	13.0	126.48
	04/18/95				15.17	12.2	127.27
W-40	02/09/94	138.0	2.49	140.49	12.66	10.2	127.83
	03/08/94				12.05	9.6	128.44
	04/18/95				10.49	8.0	130.00
W-41	02/09/94	132.2	2.66	134.86	15.22	12.6	119.64
	03/08/94				14.93	12.3	119.93
	04/18/95				14.42	11.8	120.44
W-42	02/09/94	139.0	3.20	142.20	25.76	22.6	116.44
	03/08/94				25.14	21.9	117.06
	04/18/95				24.58	21.4	117.62
W-43	02/09/94	139.6	2.98	142.58	16.18	13.2	126.40
	03/08/94				14.48	11.5	128.10
	04/18/95				13.80	10.8	128.78
W-44	02/09/94	132.9	3.01	135.91	18.24	15.2	117.67
	03/08/94				18.85	15.8	117.06
	04/18/95				16.60	13.6	119.31
W-45	04/18/95	138.7	2.73	141.43	11.31	8.6	130.12
W-46	04/18/95	133.4	2.43	135.83	13.20	10.8	122.63
W-47	04/18/95	140.7	2.43	143.13	25.24	22.8	117.89
W-48	04/18/95	140.7	2.98	143.68	25.48	22.5	118.20
W-49	04/18/95	138.9	2.67	141.57	27.78	25.1	113.79
W-50	04/18/95	138.1	2.69	140.79	21.92	19.2	118.87
RW-1	04/18/95	137.4	0.81	138.21	NM	NM	NM
RW-2	04/18/95	137.9	1.54	139.44	NM	NM	NM

Notes: MSL = Mean Sea Level
NM = Not measured

Table 3-1

SUMMARY OF WATER LEVELS

Westinghouse Commercial Nuclear Fuel Division
Columbia, South Carolina

Project No. 33143.500

Well Number	Date Measured	Land Surface Elevation (Feet MSL)	Measuring Point Height (Feet)	Measuring Point Elevation (Feet MSL)	Water Level Below M.P. (Feet)	Water Level Below L.S. (Feet)	Water Level Elevation (Feet MSL)
W-3A	03/08/94	119.1	2.15	121.25	5.21	3.1	116.04
	04/18/95				5.35	3.2	115.90
W-4	04/18/95	117.8	-0.52	117.28	6.00	6.5	111.28
W-6	04/18/95	138.2	-0.47	137.73	10.03	10.5	127.70
W-7A	03/08/94	134.3	2.06	136.36	10.57	8.5	125.79
	04/18/95				11.24	9.2	125.12
W-10	04/18/95	138.2	2.13	140.33	17.43	15.3	122.90
W-11	04/18/95	139.5	2.00	141.50	17.68	15.7	123.82
W-13	04/18/95	137.3	1.98	139.28	13.00	11.0	126.28
W-14A	03/08/94	137.3	2.57	139.87	16.65	14.1	123.22
	04/18/95				16.34	13.8	123.53
W-15	04/18/95	127.5	1.67	129.17	11.22	9.6	117.95
W-16	04/18/95	126.7	-0.50	126.20	2.60	3.1	123.60
W-17	02/09/94	138.8	1.78	140.58	14.50	12.7	126.08
	03/08/94				14.04	12.3	126.54
	04/18/95				13.90	12.1	126.68
W-18	04/18/95	138.7	-0.75	137.95	10.02	10.8	127.93
W-19B	04/18/95	141.3	2.62	143.92	22.69	20.1	121.23
W-20	04/18/95	113.9	2.21	116.11	8.17	6.0	107.94
W-22	04/18/95	138.2	-0.37	137.83	10.31	10.7	127.52
W-23	04/18/95	138.7	1.81	140.51	16.40	14.6	124.11
W-24	04/18/95	141.1	2.06	143.16	8.94	6.9	134.22
W-25	04/18/95	115.9	1.36	117.26	8.70	7.3	108.56
W-26	02/09/94	141.5	1.86	143.36	26.12	24.3	117.24
	03/08/94				25.46	23.6	117.90
	04/18/95				24.54	22.7	118.82
W-27	03/08/94	121.5	1.74	123.24	9.26	7.5	113.98
	04/18/95				9.63	7.9	113.61
W-28	04/18/95	138.4	1.69	140.09	11.55	9.9	128.54
W-29	04/18/95	138.2	1.65	139.85	11.30	9.4	128.79
W-30	03/08/94	138.2	1.91	140.11	12.40	10.5	127.71
	04/18/95				11.64	9.7	128.47
W-32	04/18/95	139.6	2.18	141.78	18.40	16.2	123.38
W-33	02/09/94	138.8	1.66	140.46	15.88	14.2	124.58
	03/08/94				15.47	13.8	124.99
	04/18/95				15.07	13.4	125.39

TABLE 3-3

HISTORICAL SUMMARY OF ORGANIC PARAMETERS
DETECTED IN MONITORING WELL SAMPLES

Westinghouse Commercial Nuclear Fuel Division
Columbia, South Carolina

Project No. 33143.500

			Volatile Organic Compounds (VOCs)						
Well Number	Sample Date	No. 2 Fuel Oil (mg/L)	Benzene (mg/L)	Ethyl-benzene (mg/L)	Tetrachloro-ethene (mg/L)	Trichloro-ethene (mg/L)	1,2-DCE (Total) (mg/L)	Vinyl Chloride (mg/L)	Total VOCs (mg/L)
W-3A	03/05/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/14/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/05/95	18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	06/29/95	20	NA	NA	NA	NA	NA	NA	NA
W-4	04/05/95	2.8	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-6	04/04/95	< 0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-7A	03/04/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/15/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/05/95	4.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-10	03/03/95	6.2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/05/95	6.4	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-11	04/05/95	2.2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-14A	03/05/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/15/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/05/95	1.3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-15	03/03/95	4.0	< 0.005	< 0.005	0.042	< 0.005	< 0.005	< 0.010	0.042
	04/05/95	7.0	< 0.005	< 0.005	0.058	0.008	< 0.005	< 0.010	0.066
W-16	04/05/95	1.2	< 0.005	< 0.005	0.100	0.017	0.017	< 0.010	0.134
W-17	12/02/93	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	02/09/94	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/05/95	4.2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-18	04/04/95	2.1	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-19B	04/05/95	< 0.50	< 0.005	< 0.005	0.014	0.010	< 0.005	< 0.010	0.024
W-20	04/04/95	0.89	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-22	04/04/95	< 0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-23	04/06/95	5.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-24	03/04/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/14/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/03/95	2.6	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-25	04/04/95	5.9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-26	12/02/93	NA	< 0.050	< 0.050	1.600	0.100	< 0.050	< 0.100	1.700
	02/07/94	NA	< 0.050	< 0.050	< 0.050	< 0.050	2.100 E	0.760	2.860 E
	03/03/95	13	< 0.010	< 0.010	< 0.010	0.015	0.260	0.280	0.555
	04/06/95	26	< 0.010	< 0.010	< 0.010	0.011	0.220	0.200	0.431
W-27	03/05/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/14/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/05/95	3.3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-28	04/05/95	0.64	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-29	04/05/95	1.9	< 0.005	< 0.005	0.021	< 0.005	< 0.005	< 0.010	0.021
W-30	03/04/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/15/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/04/95	1.4	< 0.005	< 0.005	0.006	0.006	< 0.005	< 0.010	0.012
W-32	04/05/95	3.2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL

TABLE 3-3

HISTORICAL SUMMARY OF ORGANIC PARAMETERS
DETECTED IN MONITORING WELL SAMPLES

Westinghouse Commercial Nuclear Fuel Division
Columbia, South Carolina

Project No. 33143.500

Well Number	Sample Date	No. 2 Fuel Oil (mg/L)	Volatile Organic Compounds (VOCs) Benzene (mg/L)	Ethyl-benzene (mg/L)	Tetrachloro-ethene (mg/L)	Trichloro-ethene (mg/L)	1,2-DCE (Total) (mg/L)	Vinyl Chloride (mg/L)	Total VOCs (mg/L)
W-33	03/05/92	NA	< 0.005	< 0.005	0.230	0.110	< 0.005	< 0.010	0.340
	04/14/92	NA	< 0.005	< 0.005	0.210	0.097	< 0.005	< 0.010	0.307
	02/09/94	NA	< 0.025	< 0.025	0.830	0.140	0.035	< 0.050	1.005
	04/05/95	3.6	< 0.005	< 0.005	0.100	0.034	< 0.005	< 0.010	0.134
W-35	03/04/92	NA	< 0.010	< 0.010	0.110	0.010	0.030	< 0.020	0.150
	04/15/92	NA	< 0.025	< 0.025	0.270	< 0.025	0.070	< 0.050	0.340
	02/09/94	NA	< 0.025	< 0.025	0.920	0.120	0.290	< 0.050	1.330
	10/14/94	2.2	<0.012	<0.0125	0.340	0.042	0.120	< 0.025	0.502
	04/04/95	1.9	< 0.010	< 0.010	0.190	0.018	0.042	< 0.020	0.250
W-36	03/04/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/14/92	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	02/07/94	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/04/95	1.4	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-37	12/02/93	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	02/09/94	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	10/14/94	3.8	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/04/95	0.57	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-38	02/09/94	NA	< 0.005	< 0.005	0.010	0.006	< 0.005	< 0.010	0.016
	04/04/95	0.52	< 0.005	< 0.005	0.014	< 0.005	< 0.005	< 0.010	0.014
W-39	02/07/94	NA	< 0.050	< 0.050	1.500	0.120	< 0.050	< 0.100	1.620
	04/04/95	2.1	< 0.020	< 0.020	0.470	0.063	< 0.020	< 0.040	0.533
W-40	10/26/93	NA	< 0.005	< 0.005	0.110	0.021	< 0.005	< 0.010	0.131
	02/09/94	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	10/14/94	0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/06/95	< 0.50	< 0.010	< 0.010	0.310	0.120	< 0.010	< 0.020	0.430
W-41	02/07/94	NA	< 0.050	< 0.050	1.100	0.230	< 0.050	< 0.100	1.330
	04/03/95	4.3	< 0.025	< 0.025	0.910	0.100	< 0.025	< 0.050	1.010
W-42	02/07/94	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	10/14/94	0.64	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	03/03/95	2.6	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/04/95	< 0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-43	02/07/94	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/03/95	< 0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-44	02/07/94	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	04/03/95	1.4	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-45	03/08/94	9.9	0.013	0.005	0.012	< 0.005	0.140	< 0.010	0.170
	10/14/94	25	0.012	< 0.005	0.008	< 0.005	0.130	< 0.010	0.150
	04/04/95	88	0.005	< 0.005	0.008	< 0.005	0.060	< 0.010	0.073
W-46	04/04/95	< 0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-47	04/04/95	0.60	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-48	04/04/95	< 0.50	< 0.005	< 0.005	0.880	0.170	1.100	0.550	2.700
W-49	04/04/95	< 0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
W-50	04/06/95	10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	BDL
	06/29/95	< 0.50	NA	NA	NA	NA	NA	NA	NA
RW-1	04/04/95	< 0.50	< 0.005	< 0.005	0.049	0.009	< 0.005	< 0.010	0.058
RW-2	04/04/95	< 0.50	< 0.005	< 0.005	0.150	0.045	< 0.005	< 0.010	0.195

Notes: mg/L = Milligrams per liter.
1,2-DCE = 1,2-Dichloroethene.
BDL = Below Detection Limit.
NA = Not analyzed.
E = Concentration exceeded calibration range.

TABLE 3-4

SUMMARY OF INORGANIC PARAMETERS
DETECTED IN MONITORING WELL SAMPLES

Westinghouse Commercial Nuclear Fuel Division
Columbia, South Carolina

Project No. 33143.500

Well Number	Sample Date	Ammonia (mg/L)	Fluoride (mg/L)	Nitrate (mg/L)	Gross Alpha (pCi/mL)	Gross Beta (pCi/mL)
W-3A	04/05/95	< 0.1	< 0.1	< 0.02	0.003	0.004
W-4	04/05/95	3.9	7.2	< 0.02	0.003	0.017
W-6	04/04/95	2.4	< 0.1	52	0.012	1.953
W-7A	04/05/95	100	38	31	0.010	0.125
W-10	04/05/95	10	4.2	4.6	0.002	0.006
W-11	04/05/95	0.1	< 0.1	10	< 0.002	0.628
W-14A	04/05/95	0.2	< 0.1	0.49	< 0.002	0.003
W-15	04/05/95	21	4.1	30	0.003	0.052
W-16	04/05/95	65	18	8.2	0.008	0.007
W-17	04/05/95	8.3	1.7	25	< 0.002	0.218
W-18	04/04/95	40	15	77	0.012	0.191
W-19B	04/05/95	< 0.1	< 0.1	5.3	0.002	< 0.003
W-20	04/04/95	< 0.1	< 0.1	6.5	0.005	< 0.003
W-22	04/04/95	90	13	46	0.010	0.008
W-23	04/06/95	< 0.1	< 0.1	7.0	0.007	< 0.003
W-24	04/03/95	< 0.1	< 0.1	< 0.02	0.003	0.131
W-25	04/04/95	0.2	< 0.1	< 0.02	NA	NA
W-26	04/06/95	14	3.3	4.9	0.005	0.006
W-27	04/05/95	2.3	0.1	< 0.02	0.003	0.006
W-28	04/05/95	0.2	9.4	26	0.025	0.011
W-29	04/05/95	27	6.4	19	0.014	0.035
W-30	04/04/95	50	15	190	0.036	0.040

TABLE 3-4

SUMMARY OF INORGANIC PARAMETERS
DETECTED IN MONITORING WELL SAMPLES

Westinghouse Commercial Nuclear Fuel Division
Columbia, South Carolina

Project No. 33143.500

Well Number	Sample Date	Ammonia (mg/L)	Fluoride (mg/L)	Nitrate (mg/L)	Gross Alpha (pCi/mL)	Gross Beta (pCi/mL)
W-32	04/05/95	77	18	33	< 0.002	0.226
W-33	04/05/95	< 0.1	0.1	6.2	0.013	0.011
W-35	04/04/95	0.1	< 0.1	6.0	< 0.002	0.007
W-36	04/04/95	< 0.1	< 0.1	0.36	< 0.002	0.009
W-37	04/04/95	< 0.1	< 0.1	3.4	< 0.002	0.013
W-38	04/04/95	0.5	0.1	7.1	0.007	0.009
W-39	04/04/95	< 0.1	< 0.1	26	< 0.002	0.061
W-40	04/06/95	< 0.1	< 0.1	5.7	< 0.002	0.019
W-41	04/03/95	< 0.1	< 0.1	16	< 0.002	0.044
W-42	04/04/95	14	1.0	9.4	< 0.002	< 0.004
W-43	04/03/95	< 0.1	< 0.1	4.2	< 0.002	< 0.003
W-44	04/03/95	< 0.1	< 0.1	7.8	< 0.002	< 0.004
W-45	04/04/95	1.5	0.7	1.4	< 0.002	< 0.004
W-46	04/04/95	0.7	< 0.1	5.0	NA	NA
W-47	04/04/95	57	4.4	17	< 0.003	0.145
W-48	04/04/95	6.1	< 0.1	5.1	< 0.002	< 0.004
W-49	04/04/95	< 0.1	< 0.1	< 0.02	< 0.002	< 0.004
W-50	04/06/95	< 0.1	< 0.1	< 0.02	0.005	< 0.004
RW-1	04/04/95	0.1	< 0.1	2.6	< 0.002	< 0.004
RW-2	04/04/95	0.4	0.3	12	< 0.002	< 0.004

Notes: mg/L = Milligrams per liter.
pCi/mL = Picocuries per milliliter.
NA = Not analyzed.

RAI-10 Attachment

TABLE 3-2

SUMMARY OF PARAMETERS DETECTED IN GEOPROBE SOIL SAMPLES

Westinghouse Commercial Nuclear Fuel Division
Columbia, South Carolina

Project No. 33143.500

				Volatile Organic Compounds (VOCs)									
		Total Diesel Range		Acetone	Tetrachloroethene		Trichloroethene		1,2-Dichloroethene (Total)		Total VOCs	
Geoprobe Location	Sample Depth (Feet)	Field (mg/kg)	Laboratory (mg/kg)	Laboratory (mg/kg)	Field (mg/kg)	Laboratory (mg/kg)	Field (mg/kg)	Laboratory (mg/kg)	Field (mg/kg)	Laboratory (mg/kg)	Field (mg/kg)	Laboratory (mg/kg)
GP-1	3	0.053	NA	NA	4.1	NA	0.356	NA	0.014	NA	4.5	NA
GP-1	11	< 0.025	NA	NA	0.015	NA	< 0.002	NA	< 0.005	NA	0.015	NA
GP-2	3	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-2	11	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-3	3	< 0.025	< 10	< 0.010	< 0.002	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	BDL	BDL
GP-3	11	< 0.025	NA	NA	0.011	NA	< 0.002	NA	< 0.005	NA	0.011	NA
GP-4	3	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-4	11	< 0.025	< 10	0.012	< 0.002	0.012	< 0.002	< 0.005	< 0.005	< 0.005	BDL	0.024
GP-5	3	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-5	11	0.061	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-6	3	< 0.025	21 *	0.015	0.004	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	0.004	0.015
GP-6	11	< 0.025	NA	NA	< 0.002	NA	0.002	NA	0.005	NA	0.007	NA
GP-7	5	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-7	11	73.4	NA	NA	0.007	NA	0.005	NA	0.006	NA	0.018	NA
GP-8	3	< 0.025	NA	NA	0.274	NA	0.003	NA	< 0.005	NA	0.277	NA
GP-8	11	< 0.025	< 10	< 0.010	< 0.002	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	BDL	BDL
GP-9	3	< 0.025	79 *	0.051	< 0.002	0.014	< 0.002	< 0.005	< 0.005	< 0.005	BDL	0.065
GP-9	11	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-10	3	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-10	11	19.3	NA	NA	0.129	NA	< 0.002	NA	< 0.005	NA	0.129	NA

TABLE 3-2

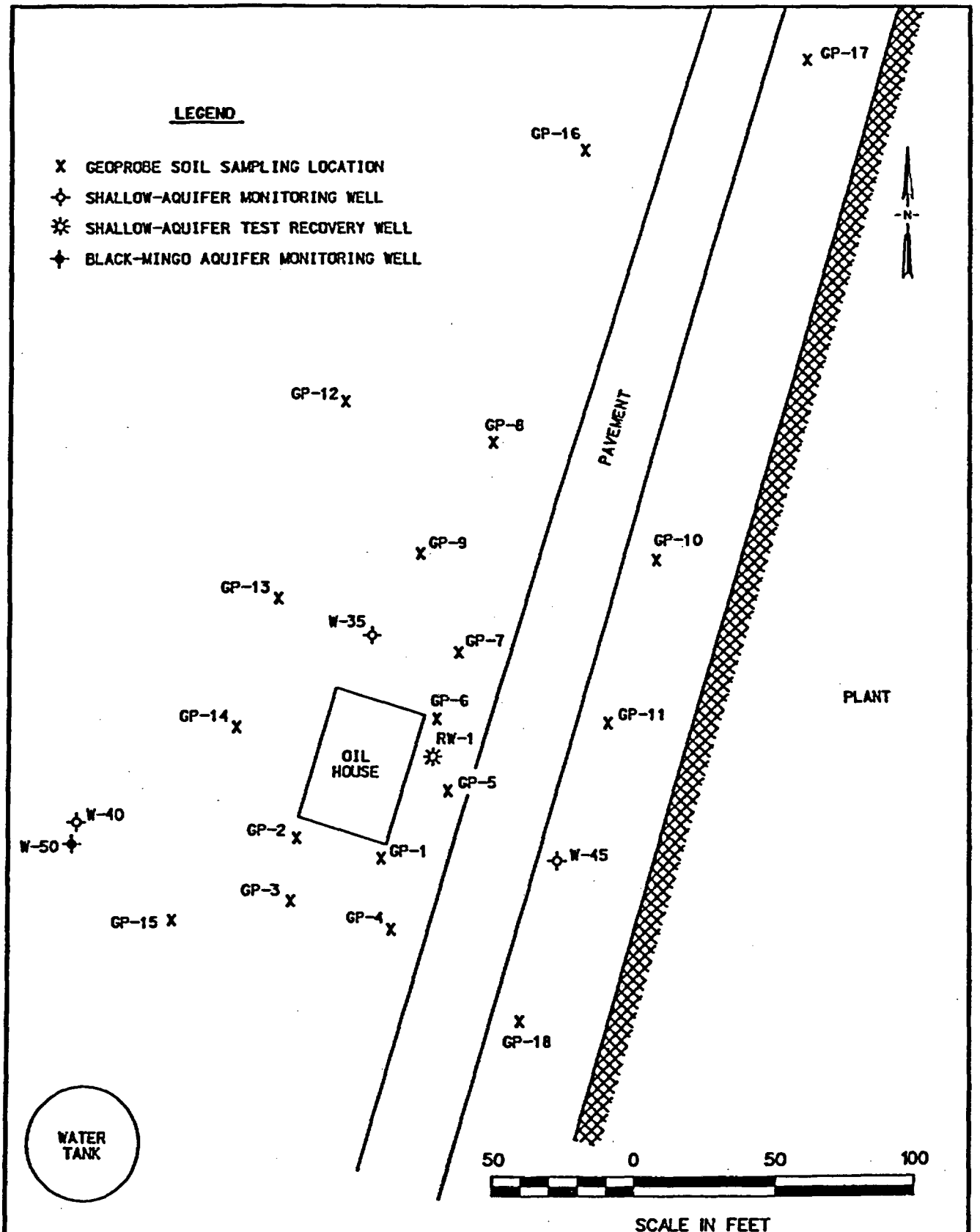
SUMMARY OF PARAMETERS DETECTED IN GEOPROBE SOIL SAMPLES

Westinghouse Commercial Nuclear Fuel Division
Columbia, South Carolina

Project No. 33143.500

				Volatile Organic Compounds (VOCs)									
		Total Diesel Range		Acetone	Tetrachloroethene		Trichloroethene		1,2-Dichloroethene (Total)		Total VOCs	
Geoprobe Location	Sample Depth (Feet)	Field (mg/kg)	Laboratory (mg/kg)	Laboratory (mg/kg)	Field (mg/kg)	Laboratory (mg/kg)	Field (mg/kg)	Laboratory (mg/kg)	Field (mg/kg)	Laboratory (mg/kg)	Field (mg/kg)	Laboratory (mg/kg)
GP-11	5	0.076	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-11	11	40.3	7200	< 12.5	< 0.002	< 6.25	< 0.002	< 6.25	0.052	< 6.25	0.052	BDL
GP-12	3	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-12	9	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-13	5	< 0.025	< 10	< 0.010	< 0.002	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	BDL	BDL
GP-13	11	< 0.025	NA		< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-14	3	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-14	5	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-14	11	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-15	3	< 0.025	< 10	< 0.010	< 0.002	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	BDL	BDL
GP-15	11	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-16	3	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-16	9	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-17	5	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-17	11	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-18	3	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA
GP-18	9	< 0.025	NA	NA	< 0.002	NA	< 0.002	NA	< 0.005	NA	BDL	NA

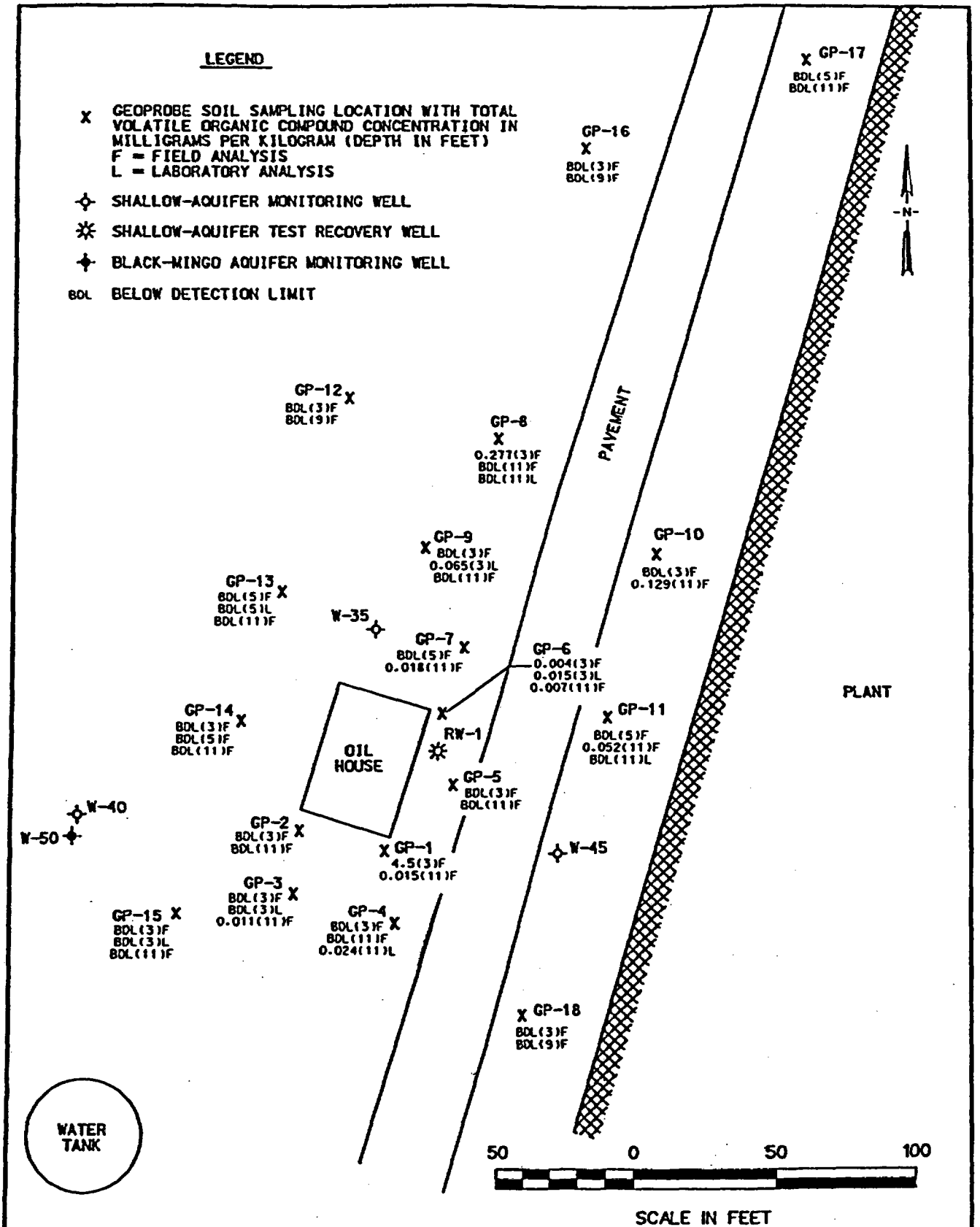
Notes: mg/kg = Milligrams per kilogram.
Field analyses performed by Microseeps.
Laboratory analyses performed by IEA, Inc.
* = Did not match typical No. 2 Fuel Oil pattern.
BDL = Below Detection Limit.
NA = Not analyzed.



WESTINGHOUSE ELECTRIC CORPORATION, COLUMBIA, SOUTH CAROLINA, PROJECT NO. 33143.500

RUST ENVIRONMENT & INFRASTRUCTURE

FIGURE 2-1
GEOPROBE SAMPLING LOCATIONS IN THE VICINITY OF THE OIL HOUSE



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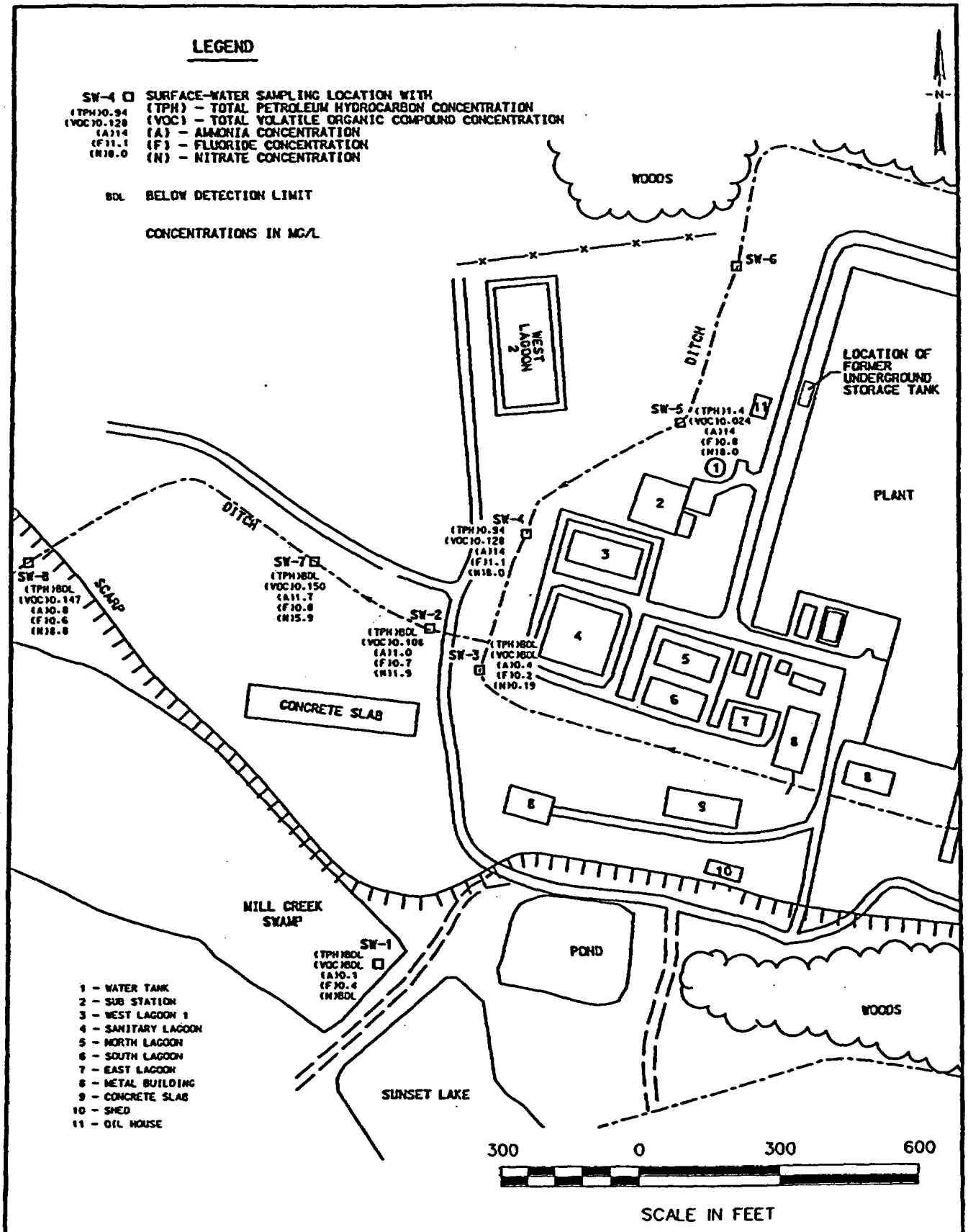
RUST ENVIRONMENT & INFRASTRUCTURE

FIGURE 3-4
MAP OF VOLATILE ORGANIC COMPOUND CONCENTRATIONS DETECTED IN GEOPROBE SOIL SAMPLES



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RUST ENVIRONMENT & INFRASTRUCTURE

FIGURE 3-16
MAP OF PARAMETERS DETECTED IN SURFACE-WATER SAMPLES, APRIL 1995

RAI-14 Attachment

SCANA. POWER FOR LIVING

Environmental Services Department

Inter-Office Correspondence

Corporate Environmental Auditing
(Office)

Subject: Alternate Proposed Hopkins Substation Site (Westinghouse) Phase I Environmental Site Assessment

Date: 9-15-03

To: Paulette Ritter
Mike Ferres

From: Lee Newman

Please find attached the Phase I Environmental Site Assessment for the alternate property identified on September 11, 2003. This assessment did not reveal conditions that would preclude the purchase of the subject property. Please note that the location/layout of the property as depicted in Figures 1 & 2 is approximate, being that a survey drawing was not available at the time of the site inspection.

It is our understanding that future construction activities for transmission lines are planned in the area of the Westinghouse property suspected to have appreciable amounts of contamination in subsurface soils and groundwater. It is anticipated that subsurface disturbance during construction activities (*e.g.* subsurface borings for transmission line poles) could be at a sufficient depth to encounter contaminants, if performed within the suspected area of contamination. Please find attached a map obtained through a Freedom of Information Act (FOIA) review at the SCDHEC, which provides an approximate location of the Perchloroethylene groundwater contamination plume. It is recommended that if the disturbance of subsurface soils will take place in this area of concern, then environmental, health, and safety precautions should be incorporated into the project work plan to address:

- the potential exposure of workers to radionuclides (Alpha and Beta particles) and conventional pollutants (Ammonia, Fluorides, Nitrates, & Perchloroethylene); and
- the management of potentially contaminated soils & decontamination of company and contractor equipment.

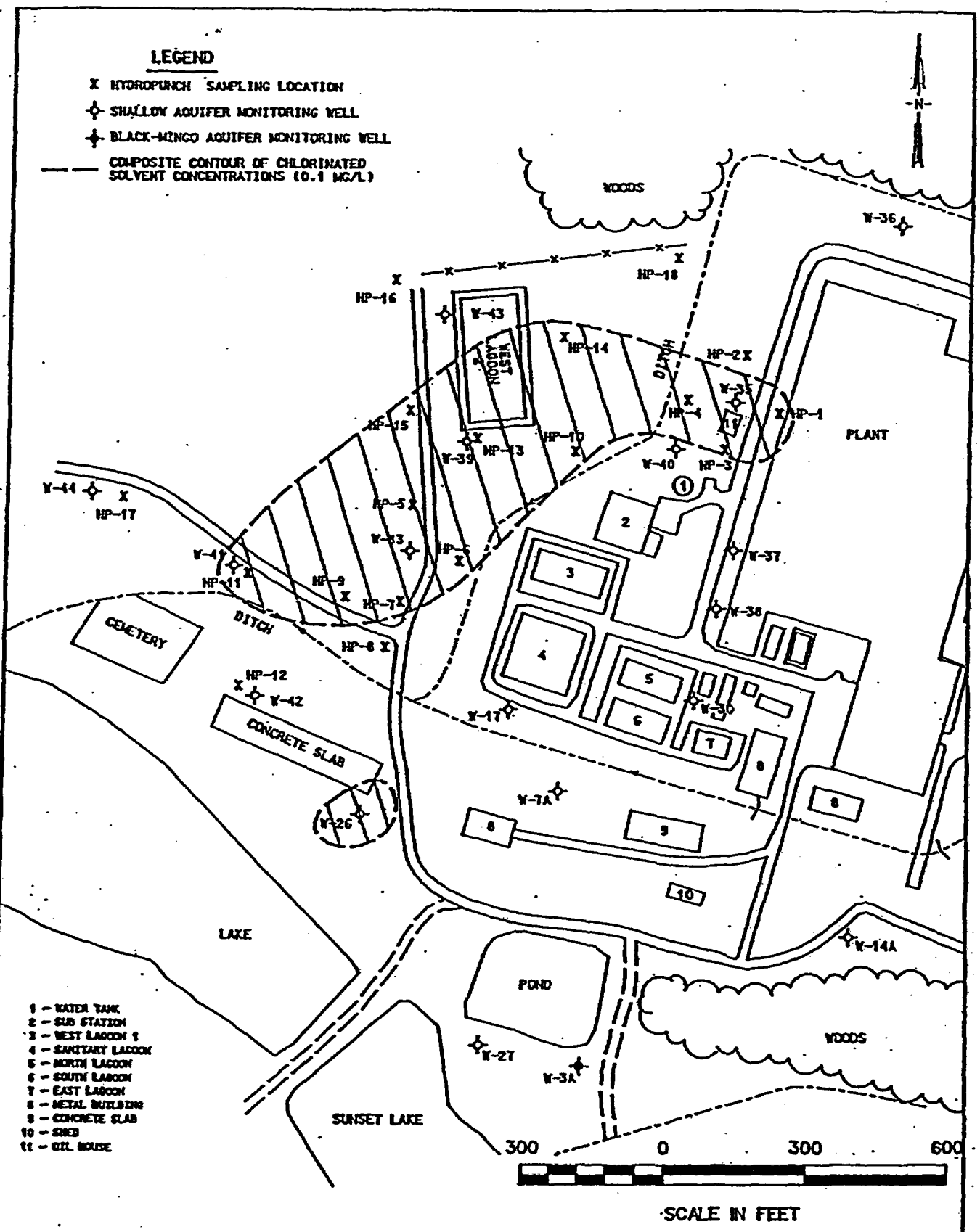
Assistance regarding worker health and safety precautions can be obtained from Randy French/SCE&G Safety Department (extension 75263). Assistance regarding the management of contaminated soils and equipment decontamination can be obtained from Laura Blake-Orr/SCANA CESD - Wires Support Group (extension 77132).

We hope that our services have been responsive to your needs and we appreciate the opportunity to assist with this project. If you have any questions, please contact me at extension 78378 or Duane Moss at extension 77324.

Attachments

- Drawing by RUST Environment & Infrastructure entitled "Figure 1-1 Composite Delineation of Chlorinated Solvent Plume"
- Phase I Environmental Site Assessment Report

cc: R.R. Mahan
D.E. Burkhalter (K-16)
D.R. Moss
T.G. Eppink (130)
G.A. Lawhon (S-38)
R.W. Thomas, Jr. (K-64)
R.C. Lindler (03A)
T.N. Effinger/File



WESTINGHOUSE ELECTRIC CORPORATION, COLUMBIA, SOUTH CAROLINA, PROJECT NO. 84820.200

RUST ENVIRONMENT & INFRASTRUCTURE

FIGURE 1-1
COMPOSITE DELINEATION OF CHLORINATED SOLVENT PLUME

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Alternate Proposed Hopkins Substation Site

Highway 48
Hopkins, SC 29061
Richland County

(to the north of the Westinghouse Electric Corporation Nuclear Fuel Division Facility located at 5801 Bluff Road, Columbia, SC 29250)

September 15, 2003

SCANA Power For Living

Corporate Environmental Services Department
Environmental Auditing Group

FOREWORD

This document has been prepared for the exclusive use of SCANA Corporation and its subsidiaries, as applicable. It is not approved to be given or otherwise distributed in any manner to any entity outside of said corporation and its subsidiaries. Requests to authorize the distribution of this report outside of the corporation must be made to the Legal Department or to the General Manager, Corporate Environmental Services Department. SCANA Corporation accepts no liability from the unauthorized use of this document.

TABLE OF CONTENTS

SECTION 1.0 - INTRODUCTION

1.1 Project Description

SCANA Services Corporate Environmental Services Department (CESD) was requested to perform a Phase I Environmental Site Assessment of a 6.89 acre tract of land located in Hopkins, South Carolina. More specifically, the property was to the west of the Westinghouse Electric Nuclear Fuels Facility, located at 5801 Bluff Road. The procurement of the property was in preparation for the siting of a new substation. The Phase I report for this property was issued July 31, 2003. From subsequent meetings with stakeholders (Power Delivery SBU), it was determined that an alternate property for the proposed substation should be pursued.

On Thursday, September 11, 2003, an alternate location was identified and inspected. This Phase I report has been prepared to document further assessment work in this geographic area for the alternate subject property. Duane Moss and Lee Newman of the SCANA Services CESD performed the site inspection. See Figure 1 for a site location map and Figure 2 for a topographic map of the area. Please note that a survey of the alternate property was not available during the site inspection, therefore, its location/layout as depicted in Figure 1 and Figure 2 should be considered approximate. For the purposes of this report, the alternate property is hereafter referred to as the "subject property".

1.2 Purpose

The performance of an Environmental Site Assessment is to develop sufficient information to allow the assessor to ascertain if the past or present uses of the subject property have resulted in environmental impact. The past and present uses of adjacent property, which could influence the environmental condition of the subject property, are also taken into consideration. Ultimately, the findings of the assessment are evaluated to determine whether recognized environmental conditions (*i.e.* impact determined to be detrimental to the environmental condition of the property) would preclude its purchase. The performance of an assessment, is intended to reduce, but can never eliminate, uncertainty regarding the potential for recognized environmental conditions about the property.

1.3 Scope of Work

The scope of work performed and methodology used to complete the work scope included the following:

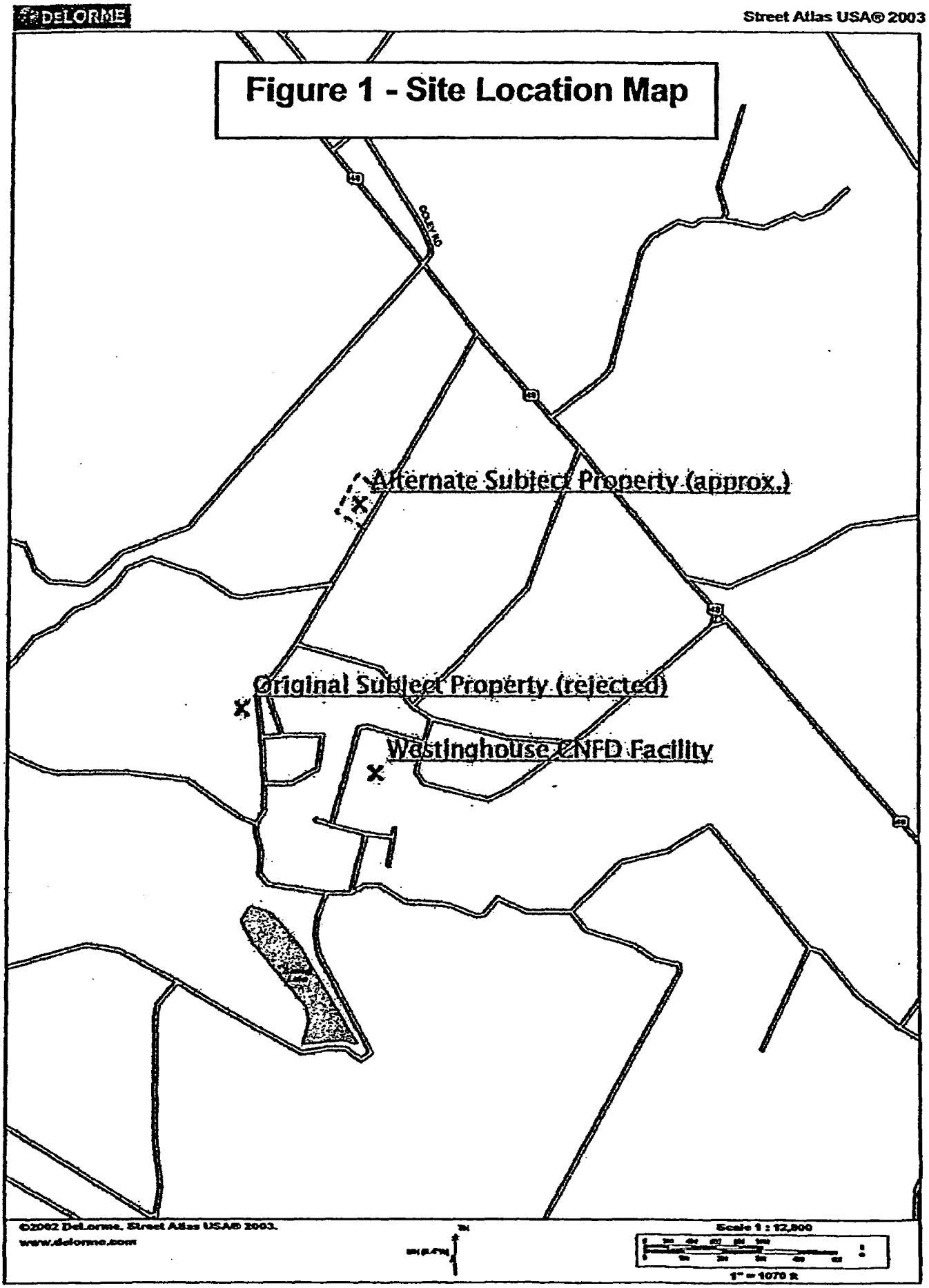
- Site inspection of the subject property and observation of adjacent properties and vicinity.
- Review of regulatory agency records to identify and assess listings at the subject site or proximal sites, through a commercial database search;
- Review of site history/land use through interviews (whenever possible), a review of deed records, and through a search of available historical data; and,
- Preparation of this report, which describes all work performed and presents a discussion of the findings of the assessment.

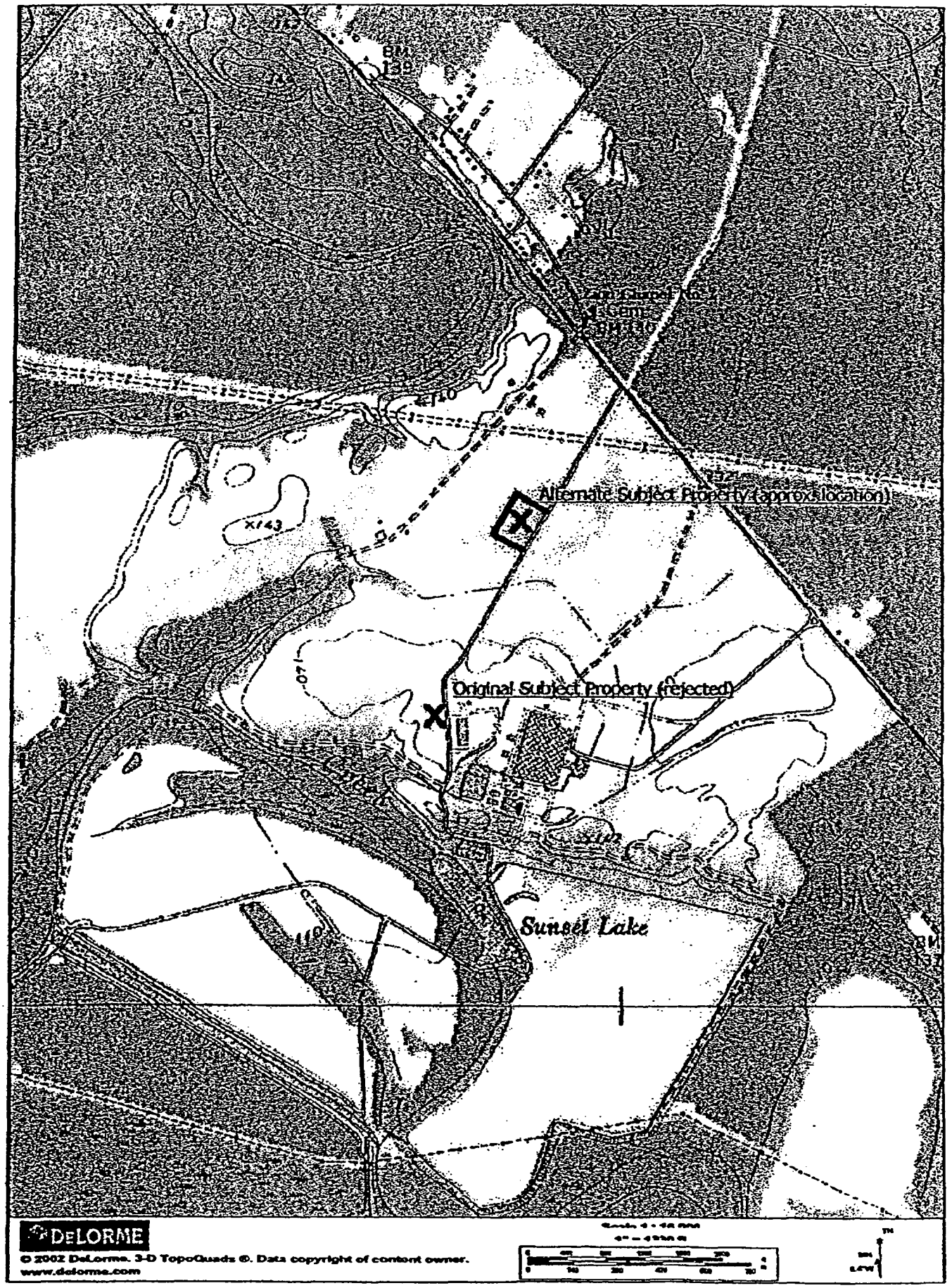
1.4 Limitations and Exceptions of this Assessment

The scope of this environmental assessment does not address several potential issues. The limitation issues are: radon gas testing; inspection for the presence of asbestos containing materials and lead-based paint for any existing structures/debris located on the subject property; testing for the presence of lead in drinking water within any existing structures on site; the testing for the presence of contaminants in groundwater and surface water; and the delineation of jurisdictional wetlands.

Exceptions for this assessment are as follows:

- *Historical fire insurance maps and city directories were not consulted during this assessment, due to the rural (past/present) nature of the location of the subject property.*


DELORME
Street Atlas USA® 2003
Figure 1 - Site Location Map
COLEY RD
Alternate Subject Property (approx.)
Original Subject Property (rejected)
Westinghouse CNFD Facility
©2002 DeLorme. Street Atlas USA® 2003.
www.delorme.com
Scale 1 : 12,800
1" = 1070 ft


BM
139
Alternate Subject Property (approx location)
Original Subject Property (rejected)
Sunset Lake
DeLORME
© 2002 DeLorme. 3-D TopoQuads ®. Data copyright of content owner.
www.delorme.com

2.5 Environmental Liens

There was no record of a (NPL) Superfund Lien filed by the USEPA against the subject property.

2.6 Current & Past Use of the Property

The property is currently used for silvicultural purposes (softwood - pine). A review of the chain-of-title information indicates that the property was not used for commercial purposes until 1967, when purchased by Westinghouse Electric Corporation. Although owned by Westinghouse, the prior property owner possessed farming rights until the late 1980's.

2.7 Adjacent Properties

With the exception of the nearby Westinghouse facility to the south, the adjacent properties were owned by Westinghouse and undeveloped (with the exception of the gravel road bordering the subject property to the east and the employee walking/jogging trail further to the east) or used for silvicultural purposes at the time of the site inspection. Please see discussion in Section 4.1 regarding the Westinghouse facility.

SECTION 4.0 - INFORMATION FROM SITE RECONNAISSANCE AND INTERVIEWS

4.1 Comments & Observations

There were no recognized environmental conditions at the subject property during the site inspection on September 11, 2003. Although a wetlands delineation was not within the scope of this assessment, the assessors did not observe the total characteristics typical of wetlands.

The Westinghouse facility (to the south of the subject property) manufactures nuclear fuel assembly rods. The facility has experienced two documented groundwater contamination events since 1981. The first involved a release of fluorides, which has since received "No Further Action". The second event was discovered during February of 1989 during a regulatory inspection. In response to the findings of the inspection, the facility performed a groundwater assessment that identified Perchloroethylene (*aka* Tetrachloroethylene, a volatile organic compound that is a dense non-aqueous phase liquid) contamination, moving towards the southwest. It was confirmed that the plume was limited to the uppermost aquifer. The depth to the aquifer was found to be at a depth ranging from 15 to 30 feet below land surface (1995 data). Note that this was the static water level taken during the sampling event, and does not take into consideration the "true" rise and fall of the level of groundwater over time. An Air Sparge/Soil Vacuum Extraction (AS/SVE) system was installed to remediate the plume and remediation is ongoing.

In addition to the groundwater releases, the facility operates a number of NPDES permitted surface impoundments (*i.e.* lagoons) to treat the wastewater generated from their manufacturing efforts, as well as for sanitary sewage. There is a groundwater monitoring network in place for said lagoons, as required by their NPDES permit. Pollutants analyzed for under their groundwater monitoring plan include radionuclides (Alpha and Beta particles), Ammonia, Fluorides, and Nitrates.

From data generated by Westinghouse's consultant (RUST), it appears that the Perchloroethylene groundwater contamination plume's closest point is approximately 2,000 feet to the south of the subject property. For reiterative purposes, groundwater migration in the uppermost aquifer is from the Westinghouse facility to the southwest (generally moving away from the subject property).

4.2 Interview List

NAME	AGENCY / COMPANY AFFILIATION
Mr. Pete Roebuck	Maintenance Manager, Westinghouse
Mr. Roger Fischer	Environmental Engineer, Westinghouse

SECTION 5.0 - FINDINGS & CONCLUSIONS

5.1 Findings

The SCRDI-Bluff Road Site, a National Priority List (*i.e.* SUPERFUND) site, is located within a one-mile radius of the subject property. At the time of this assessment, the SCRDI-Bluff Road Site does not appear to have detrimentally impacted the subject property, and clean-up activities are ongoing under the direction of the USEPA and the SCDHEC.

There were no recognized environmental conditions associated with the current and past use of the subject property that would indicate a detrimental impact to the subject property. The Westinghouse facility has impacted groundwater quality in the area, however, groundwater contamination is to the south of the subject property and groundwater movement is from the Westinghouse facility to the southwest. It is unlikely that the subject property has been impacted by the historical groundwater contamination episodes discovered/reviewed during this assessment.

5.2 Conclusions

This assessment did not reveal conditions that would preclude the purchase of the subject property, nor did it reveal conditions that would have environmental, health and safety implications for the disturbance of subsurface soils and groundwater at the subject property during construction of the substation.

SECTION 6.0 - SIGNATURE PAGE

Any questions regarding this report should be directed to Lee Newman (ext. 78378) or Duane Moss (ext. 77324).

SEAL:

T. Lee Newman, Jr., REPA
National Registry of Environmental Professionals
Registered Environmental Property Assessor
REPA # 3022